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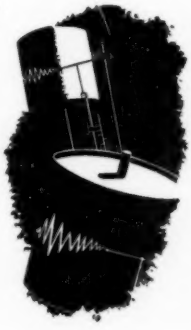

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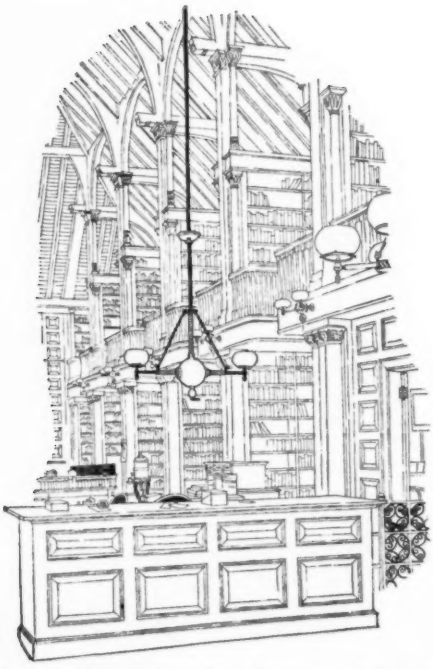

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The Role of The Kidney in Sodium, Potassium and Water Metabolism

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1. *INTRODUCTION*:

The role of the kidney in sodium and potassium excretion and water balance is the subject for this morning, which covers, as you will agree, a very wide territory. An attempt will be made to keep the discussion directed towards clinical problems. Constitution of the cellular environment is controlled principally by the kidney. If the kidney does not issue all of the orders it certainly is the organ where most of these orders are carried out. Everyone is familiar with the fact that eveything that goes into the gut practically is reabsorbed and no discrimination is shown. On the other hand, the kidney shows a very highly developed selective action in removing undesirable substances that have gained entrance to the blood plasma. The role of the kidney in homeostasis is so fundamental that MacCallum has called it the organ of evolution par excellance.

To look upon the kidney as an organ of excretion is a very common error among physicians, besides being a most inadequate description of its function. The kidney is responsible for maintaining the electrolyte ratios of which we spoke yesterday, and surely this is an important role in itself. To facilitate handling this subject, sodium, potassium and water balance and the concentrating mechanism will be described separately.

2. *MECHANISM FOR HANDLING SODIUM*

The mechanism for handling sodium is best shown in this diagram of the kidney. Here is the glomerulus, first convoluted tubule, thin limb, distal tubule, and collecting ducts. The present accepted concept is that all electrolytes in 130 cc of blood are filtered every minute at the glomerulus entirely by physical processes, and in the first convoluted tubule approximately 85% of the sodium is actively reabsorbed.[1] Let us be very clear as to just what is meant by active reabsorbtion of sodium. To put it very crudely and possibly over simplified, it means that sodium is picked up from the glomerular filtrate, transferred through the cell and pushed back into the blood with the expenditure of a considerable amount of energy. This means that the water now remaining in the tubule is hypotonic as compared to the blood. Now we have an osmotic force to explain the passive diffusion of water from tubule to blood. As a result of this state of affairs, the urine that is delivered to the distal tubule is isomotic. 15% of the sodium in the glomerular filtrate is reabsorbed actively in the distal tubule.

Therefore, the only sodium spilling into the urine is that in excess of the tubular ceiling. Let us take a crude example in convenient figures—if a thousand grams of sodium chloride are filtrated by the glomerulus and 850 grams are reabsorbed in the proximal tubule and the 150 grams in the distal tubule and this constituted its ceiling, then if 1500 grams are filtered—1275 are removed in proximal tubule, but 225 are delivered to distal tubule whose ceiling is 150 grams, therefore, 75 grams spill into the urine.

Besides the mechanism for the conservation of base which we described yesterday, there is another odd mechanism with which clinicians should become familiar. If pressure is applied to the renal vein by clamp directly or even a tight abdominal binder—then sodium disappears from the urine, but potassium excretion remains unchanged. Indeed this back pressure in the renal vein in cogestive failure explains some of the sodium retention and edema, so characteristic of the condition.[2] The mechanism of edema in cogestive failure has been elucidated by Borst[3] and Merril[4] Stead.[5] For example, with decreased cardiac output there is less blood delivered to the kidney. 85% of the sodium in the glomerula filtrate is removed in the proximal tubule and 15% in the distal tubule, an amount which would be so far under its ceiling that it would be returned completely. None spills into the urine. Therefore, sodium retention. To

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use our example again—if instead of 1000 grams of sodium being filtered at the glomerulus, the amount is now reduced to 500 grams. Then 425 grams will be absorbed in the proximal tubule leaving only 75 grams for the distal tubule whose ceiling is 150 grams. This is so far below its capacity that none spills into the urine. This mechanism of decreased blood flow to the kidney is of acceptable validity at the moment for explaining the edema so commonly present in this situation.

3. *THE MECHANISM FOR HANDLING POTASSIUM*

It has been believed until the last several years that the manner of potassium excretion by the kidney was a failure of total reabsorbtion. That is, all the potassium was filtrated at the glomerulus and that which appeared in the urine just did not get reabsorbed by the tubules. As a result of the work of Mudge et al[6] and Berliner and his group,[7] it now appears that under ordinary circumstances, this particular mechanism does not account for more than 20% of the potassium that appears in the urine. The other 80% is due to secretion of potassium probably in the distal tubule. Here again, one means by a secretory mechanism, that the potassium is picked up, is transported across or thru the cell and pushed into the urine with the expenditure of energy. This is a very revolutionary concept and explains some of those peculiar cases of the low potassium alkalosis syndrome.

To be more detailed about this statement, one can say that under many conditions sodium disappears out of the urine, as has been outlined above. But the mechanism for the conservation of potassium is at best quite unsatisfactory. Potassium spills constantly into the urine as long as there is an appreciable level in the blood. For instance in those cases of dehydration associated with alkalosis the potassium level in the blood falls, and the usual relationship between potassium and hydrogen ions in the kidney tubule is therefore upset. Under normal conditions there is a certain balance between the tubular activity in its excretion of hydrogen ions and in its secretion of potassium ions.

Now if you give a patient large amounts of potassium salts there is an excessive amount of potassium transported by the blood, normal levels are maintained by an increased secretion of potassium by the kidney. This increased potassium now takes up more than its share of a common pathway traversed by potassium and hydrogen ions. Accordingly the urine will be alkaline and the body fluids on the acid side, because there is a reduction in excretion of hydrogen ions. On the other hand if there is a low potassium level in the blood for any reason, the amount of hydrogen ions being spilled into the urine is proportionately increased.[8] Therefore, one finds an acid urine and alkalinity of the body fluids. This relation of the kidney to potassium and hydrogen ions explains the phenomena of a low potassium in the presence of an alkalosis, which can be treated satisfactorily only by supplying the required amount of potassium. Again, it might be pointed out, a low potassium level is associated with most obvious symptoms and is quite undesirable. While a high potassium is frought with grave danger to life itself. In doubt, remember a low plasma potassium is bad, a high plasma potassium is dangerous.

This brings up a clinical problem of the utmost importance,—how are you going to get rid of body potassium in the presence of an anuria? One hears a great deal of talk about artificial kidneys, accompanied by some measure of a theatrical atmosphere about its utilization. However, its principal advantage is in getting rid of a high plasma potassium level. It is very comforting to know that if one has the misfortune to run into an anuria for any length of time, that a hyperpotassemia can be prevented by feeding the patient an adequate caloric intake in the form of butter and sugar exclusively. The high potassium levels in anuria of course are ordinarily due to the breakdown of tissue cells to provide fuel, and the liberation of potassium. To show how practical it is to maintain a normal plasma potassium level on a sugar fat regime—there was a case in Bellevue recently with an anuria of 39 days duration, in which all blood chemistries including potassium were within relatively normal limits. So that one can sum up the potassium situation by saying that 80% of the potassium appearing in the urine is a result of tubular secretion and only 20% on the basis of glomerular filtration. It might also be mentioned that orange juice contains approximately 5 milli equivalents per 100 cc's and is hardly suitable in anuria.

4. *MECHANISM FOR THE HANDLING OF WATER*

In the diagram of the kidney tubule you will recall that the proximal tubule reabsorbed 85% of the sodium. 85% of the water in the glomerular filtrate was removed passively from the first part of the tubule to the end of the thin limb. Now what does one mean by passively when compared to actively reabsorbed?

Well, we have seen that active reabsorbtion means pick-up, transport and unload. Now passive reabsorbtion means when you remove the sodium the fluid in the tubule is now hyposmotic. The fluids bathing the tubule are hypertonic and as a result of osmosis the water is swept from the tubule into the extra-cellular and vascular spaces. The urine delivered then to the distal tubule is again balanced or is isosmotic. At the distal tubule we have seen that sodium is actively reabsorbed. Again, we have the same passive reabsorbtion of water to follow the

sodium, if, and this is a very large if, there is present the A. D. H. hormone from the pars nervosa. Up until this year this reabsorbtion of water was considered to be an active process in which A. D. H. was an essential component of the enzyme system involved. Now of course it is felt that it is a passive affair, but A. D. H. must be present.[12] This is far from a settled affair. It is on this portion of the tubule that the adrenal cortex acts upon water excretion and remember, this is an action independent of, and separate from it's relation to soduim. It would appear at the moment, as though the water reabsorbed by the distal tubule depended upon the balance between the A. D. H. and the water controlling factor in the adrenal cortex. This distal tubular control of water, that is about 15% of the glomerular filtrate is the only portion that is effected in diabetes insipidius, which has been designated by Homer Smith[9] as facultative reabsorbtion, and the proximal tubule, thin limb, section as obligatory reabsorbtion.

One might well ask the question, "What controls the level of A. D. H.?" At the moment one can say that within the reaches of the internal carotid arteries there are structures which are sensitive to and form stimuli directed towards pars nervosa as a result of a change in the osmotic capacities of the blood.[10] These osmo receptors are sensitive also, and respond to certain anesthetic agents as well as severe emotional disturbances. This explains the small volume of urine that one sees under emotional circumstances and sometimes after an operation.

To make this point crystal clear, one can say that in the distal tubule of the kidney the reabsorbtion of sodium increases osmotic capacities of the blood. This blood is carried to the osmo receptors, the pars nervosa is stimulated, A. D. H. is formed and more water is reabsorbed, until equilibrium is reestablished.

If for any reason there is a dilution of the plasma with a decrease in its osmotic capacities then there is a decreased number of stimuli from the osmo receptors, decreased formation of the A. D. H. the result being water is not reabsorbed in the distal tubule and a diuresis takes place, until equilibrium is again established. The role of the adrenal cortex appears to be essentially under most situations an organ for water excretion.[11] Every clinician knows how vulnerable Addision's disease is to water. This is an action separate and distinct from its role in retaining sodium and excreting potassium. In a rough way one might say for simplification that there is a dynamic equilibrium between the pars nervosa and the adrenal cortex in their control of water excretion. They appear to balance one another. They have their action on the distal tubule.

6. *CONCENTRATING MECHANISM*

The concentrating mechanism is the least understood of all phenonema that have been discussed in this presentation, and there is considerable doubt as to where this takes place. Either in the lower end of the distal tubule or in the upper portion of the collecting tubule. It is perfectly true there is no experimental evidence to suggest that the distal tubule secretes water and therefore the only mechanism by which the urine could be concentrated, is that water is preferentially reabsorbed and by the same token, the only way the urine can be diluted is selective reabsorbtion of an electrolyte. The only electrolyte that is present in significant quantities is sodium. Only recently it was considered that this water reabsorbtion in the distal tubule and the concentrated mechanism were a single process, both of which were dependent upon the presence of A. D. H.[12]

It has become increasingly difficult to substantiate this concept, and at the moment it seems preferable to conclude that they are separate processes and that the concentrating mechanism regardless of its location depends upon removing a small quantity of water from a small volume of isosmotic urine. This concentrating mechanism does not depend on A. D. H., because in a completely diabetic insipid dog with dehydration a hypertonic urine can be produced as was shown by Shannon.[13]

SUMMARY

1. The greatest regulator within the body of the constancy of the cellular environment is the kidney, in which 4 main processes are involved. Filtration, reabsorbtion, secretion, and concentration.

2. 85% of the sodium in the glomerular filtrate is reabsorbed in proximal tubule. 15% is absorbed in the distal tubule. Both are active processes. Work is done. Energy expended.

3. 20% of the potassium in the urine is spilled at the glomerulus while 80% of the potassium appearing in the urine is due to tubular secretion. There is no mechanism for the conservation of potassium.

4. There is a passive obligatory process in the proximal tubule in which 85% of the water is reabsorbed. A facultative distal tubular process in which 15% of the water reabsorbed is also passive, but which does not occur in the absence of A. D. H.

5. Glucose is reabsorbed in the proximal tubule. Glucose is a diuretic for 2 reasons.

    1. It brings water into the blood stream without a covering base.

    2. At the ceiling for tubular activity of glucose reabsorbtion some increased sodium is spilled into the urine.

6. There is a concentrating mechanism either in the lower portion of the distal tubule or possibly the collecting ducts in which a small volume of water is removed from a small volume of isosmotic urine.

7. A simple sound and satisfactory approach to disturbances of Acid Base Balance and Water Equilibrium is to remember that sodium chloride solutions will repair any defect of the plasma except a ketosis where glucose has its most useful application and in low potassium associated with alkalosis and dehydration. It is of the utmost importance for clinicians to objectively visualize in terms of chemical diagrams, the altered plasma patterns, because this represents the only basis upon which one can have a thoroughly sound and rational therapeutic approach.

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Severe Potassium Deficiency Complicating Paralytic Ileus

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Severe potassium deficiency occurring following gastro-intestinal disease is a clear-cut and well authenticated clinical entity which, however, is not infrequently over-looked. The present case clearly demonstrates these points and in addition, striking electrocardiographic changes were noted which dramatically returned to normal paralleling the patient's improvement.

The patient was a 10 year old white male child who was first seen in the Columbia Hospital emergency room on 1-24-52, complaining of pain in his abdomen. His parents stated that the onset had begun five days prior to this date, with epigastric pain which later became localized in the right lower quadrant. Obstipation had been present for two to three days and he had begun vomiting during the last 36 hours. Further details of the history were non-contributory. On physical examination he was an extremely emaciated child who showed some evidence of dehydration and who was in acute distress. Pertinent findings were limited to the abdomen. Marked distention, tenseness and exquisite tenderness were present throughout. Rebound tenderness, spasticity of the muscles and marked dullness to percussion were all present in the right lower quadrant. Active peristalsis was not audible. No masses were noted except on the rectal examination where a large mass was felt to protrude into the rectum from the right side of the pelvis. Admission laboratory work revealed a white count of 32,100 with a marked shift to the left, and a hemoglobin of 71%.

A diagnosis of appendicitis with perforation and abscess formation was made, and because of the rapid increase in distention, the abdomen was explored. Appendiceal abscess was found and drainage was instituted. No attempt was made to remove the appendix at that time and the abdomen was closed with multiple drains left in place.

Following surgery Wangensteen suction was continuously employed for the next eleven days and the patient was maintained entirely on intravenous fluids consisting of 1,000 cc's of 5% dextrose in distilled water alternated with 1,000 cc's of 0.9% saline daily followed by 1,000 cc's of 5% Amigen daily. The patient received two blood transfusions for a total of 500 cc's during this period of time. Specific therapy

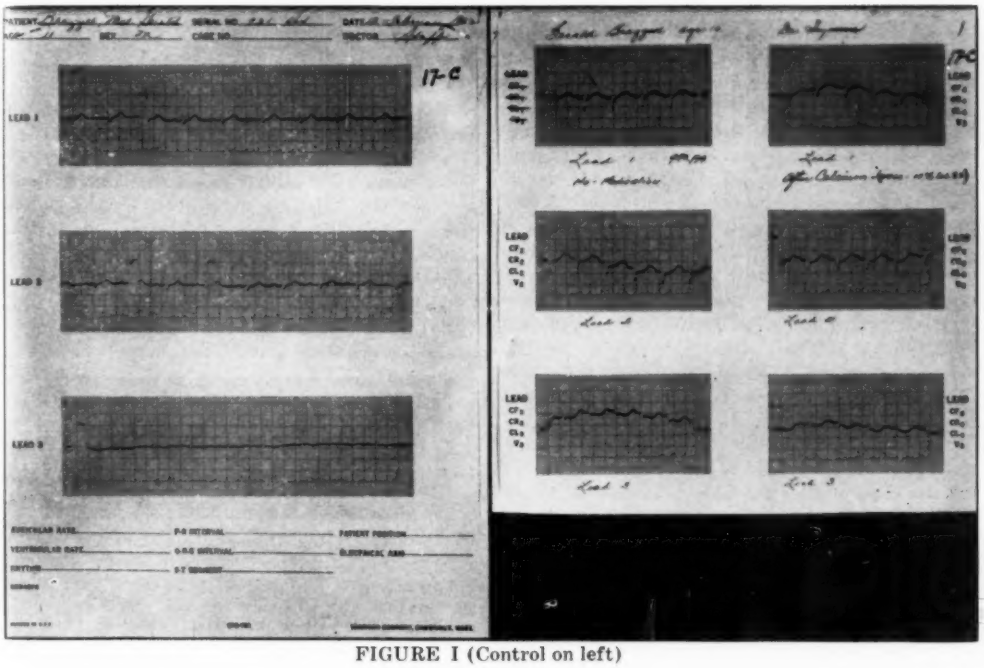

FIGURE I (Control on left)

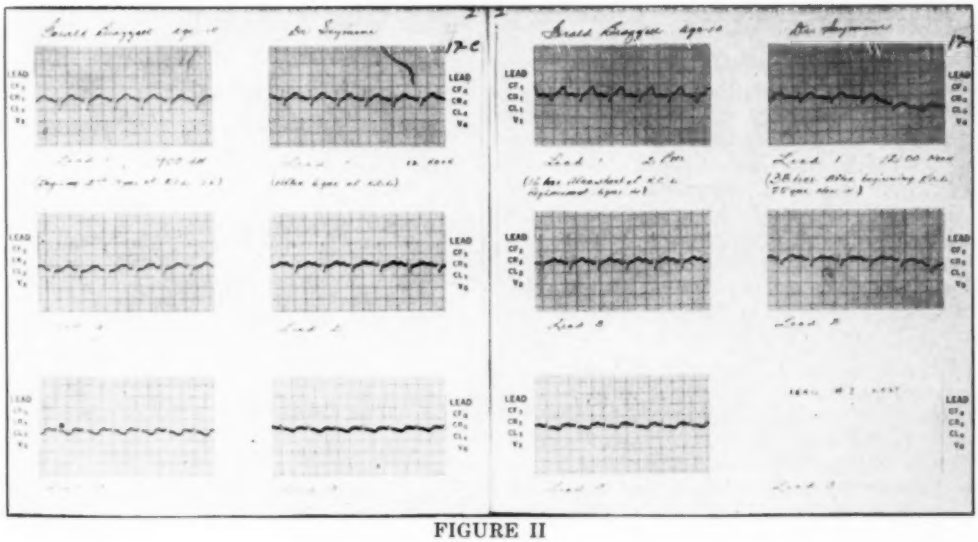

FIGURE II

of penicillin and streptomycin was given continuously but in spite of the treatment just outlined, the patient went progressively down-hill with continuous and steady increase in distention, failure to develope audible peristalsis and failure to expel flatus or have bowel movements. On the tenth post-operative day the patient was extremely ill. The carbon dioxide combining power of the patient's blood was found to be 58%. His blood chloride was 320 mg. (normal: 450-550). Because of the clinical condition and the result of the laboratory studies, the possibility of further electrolyte imbalance complicating the hypochloremia was considered and an electrocardiogram was ordered.

The initial electrocardiographic tracings showed typical evidence of extreme potassium deficiency with prolongation of the QT time and flattening of the T wave (rolling type). (See Figure 1.) Immediate

treatment was instituted in an attempt to correct the electrolyte imbalance. Because of the close similarity of hypopotassemia and hypocalcemia, intravenous calcium was given without marked change of the electrocardiographic abnormalities. (See Figure 1.) Following this, intravenous potassium was given with frequent electrocardiographic observations. A total of 7.5 grams of potassium given over a period of 38 hours, all intravenously, was required for definite and adequate clinical and electrocardiographic evidence of improvement. Clinically, 12 hours after the onset of potassium therapy and after a total of only 3 grams of potassium, the patient exhibited marked improvement and had, for the first time, three loose, liquid stools. Electrocardiogram (See Figure 2) at this time showed only slight improvement. Three hours later after a total of 6 grams of potassium, slight but definite further improvement was noted (Figure2). Further tracings showed continuous improvement but it was not until several days later that the tracing had returned to an entirely normal state (Figure 1, control tracing). The clinical improvement paralled to a large extent the electrocardiographic changes and the patient continued to exhibit active peristalsis, decrease in abdominal distention and return of the deep reflexes. Within 36 hours the Wangensteen suction was removed and by 48 hours later he was eating a soft diet, sitting up in bed and was generally considerably improved. He subsequently underwent appendectomy and upon recovery from this was discharged.

DISCUSSION:

This case is an excellent example of the insidious and progressive development of extreme potassium deficiency while the patient was under careful observation in a hospital. The syndrome is quite characteristic and easy to diagnose if constantly kept in mind by attending physicians. The characteristic picture of asthenia, hypoactive reflexes, absent bowel sounds, anorexia, and failure to make proper clinical improvement should always suggest electrolyte imbalance even though careful attention to parenteral fluids has been given. The use of the EKG should aid considerably in this problem. We were greatly impressed here with the electrocardiographic findings which were of extreme value both in diagnosis and treatment of the patient.

The patient had two primary factors operating to produce the severe potassium deficiency just described: 1. He had continuous Wangensteen suction—since the concentration of potassium in the gastric juice is two to three times that in the blood,[1] large quantities were doubtlessly lost in that manner; 2. In addition, no potassium was given to replace that lost daily via kidney excretion.

Intestinal and gastric atony have been previously described as part of the clinical picture of severe potassium deficiency.[2] Noting the rapid response in this case following intravenous potassium as regards the paralytic ileus, it would seem that the ileus was at least in part due to the existing deficiency of potassium.

The EKG changes were typical of severe potassium deficiency[3] and the reversal of these abnormal tracings closely paralled the clinical response.

In concluding it would seem worthwhile to restate the importance of careful *total* electrolyte studies in the post-op patient, with special emphasis on the value of the EKG in detecting and following treatment of potassium deficiency. It would further seem that if a patient is to be maintained on parenteral fluids exclusively, the average daily requirement of 3 grams of potassium should be met in the parenteral feeding.

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Acute Idiopathic Pericarditis

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What is currently being called benign acute idiopathic pericarditis, acute benign pericarditis or virus pericarditis may be a disease, but under the usually accepted criteria of a disease it varies so much in its manifestations and course that it can hardly be accepted as such. There has been a dearth of pathological studies and the etiology is not known. In many instances it is preceded by or accompanied by a respiratory infection which is usually accepted as virus in nature, but this is not true in a large minority of instances. The course of the disease varies from a few days to several months and relapses are frequent. In about half of the reported cases a leucocytosis is found and in the other half a normal or lowered leucocyte count is reported. In addition to the conjecture that there is a viral etiology other suggestions have been that the syndrome is related directly to a streptoccus infection or an allergic response to an in-

*Sponsored by the VA and published with the approval of the Chief Medical Director. The statements and conclusions published by the Author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

fectious agent. In all of the cases the diagnosis must always be made by elimination of other better recognized causes of pericarditis. It is difficult in reported cases accurately to determine whether pericardial effusion is frequently or infrequently an accompaniment. The question is always present as to whether myocarditis always, or only sometimes accompanies the syndrome. Certainly, it is not a new disease. Dr. Hodge of the Massachusetts General Hospital, as quoted by Carmichael et al,[1] described what was probably a case of this type in 1854. Morrison in 1906 and Cromer in 1927 described several cases probably of this syndrome.[1] The modern concepts of this interesting syndrome begin with its description by Barnes and Burchell[2] in 1942. These authors incidently relate the review of one case occuring in 1923 and one in 1930 who were originally thought to have myocardial infarction but who in retrospect had idiopathic pericarditis.

In most instances the patient, who may be male or female, young or old, describes an upper respiratory infection of a mild or moderate nature which was usually not incapacitating. There may or may not be an interval of a few days and the syndrome is ushered in by an attack of acute anterior chest pain. In the classical instance this pain is sharp, severe, and stabbing, increased by deep breathing, coughing, torsion of the body or the supine position. Located in the substernal or precordial regions or even in the right upper quadrant, the pain at times radiates to the left shoulder and arm or both of these. This pain is usually severe though it may be of only mild degree. Variable in duration, it usually persists for from one to several days and may even come and go for several weeks. At times the onset may be less abrupt over a period of a week or more. There is usually accompanying fever of from 99°F. to 102°F.

If the patient is carefully observed early in the course a precordial friction rub is heard in a high percentage of the cases. This friction rub may be of only a few hours duration but usually persists for two to three days though at times it is heard at intervals for several weeks. The heart rate is usually rapid but may be only slightly increased. The rhythm is regular but a gallop is heard at times in the more severe cases. During the early course the heart is not enlarged, however, where the syndrome runs a prolonged course the outline of the heart is enlarged, at times grossly, both to the left and the right. Where effusion of any great amount is present a paradoxical pulse can usually be demonstrated. Pain and a precordial friction rub occasionally persist even where demonstrably large amounts of fluid are present in the pericardial sac. After the exudation of pericardial fluid begins the heart sounds usually become muffled, but not necessarily so. Pericardial tap for therapeutic effect on tampanard rarely becomes necessary in this syndrome. It has been done frequently for diagnostic purposes. The fluid may be clear amber but frequently is serosanguineous. It contains relatively few leucocytes and is sterile for pyogenic organisms and the tubercle bacillus. There have been no reports of virus studies. The blood pressure is not usually changed from its ordinary level but may be elevated due to pain and anxiety. The lungs frequently show evidence of non specific infection with scattered rales. Pleural effusion is present in a small percentage of cases. Symptoms and physical findings consistant with congestive failure are present in the more severe cases during the course of the illness. The dyspnea seen is usually due to painful respirations, but in cases associated with congestive failure it is of a different character. There are no specific findings in the urine or blood. The leucocyte counts may be lowered, normal, or elevated to above 20,000 per c mm. with polymorphoneuclear predominance.

The EKG findings are quite important in the diagnosis. Early, within a few hours, there is elevation of the ST segment of more than 1 milivolt in at least two of the limb leads and frequently of the chest leads to the left without reciprocal depression. There is no reciprocal ST depression. These changes are frequently quite effevescent and although the ST segment elevation may persist for several days the usual occurence is a lowering of the ST segment and at the same time a lowering of the T waves within a few days. Within several days the T waves become sharply inverted. At no time does a Q wave develop and the ST segment does not become depressed. In some of the mild cases of short duration the flattening and inversion of the T wave fail to develop. After the T waves become inverted they remain so for an indeterminate length of time from a few days to several months, depending in all probability on the duration of the pathological process. However, in almost all of the cases there is an eventual return to a normal EKG pattern.

X-ray of the chest early in the course reveals normal findings as far as the heart is concerned. In a number of cases pulmonary changes of lobular pneumonia and in a few, a small to moderate pleural effusion is found. Except in the mild and effevescent cases the size of the cardiac shadow becomes enlarged over a period of seven to ten days and may assume immense proportions. It usually assumes a globular shape and all the usual contours of the heart are obliterated except that the acute cardio hepatic angle may be retained. At this stage the normal ventricular contractions, as usually seen by fluroscopy, are absent or markedly reduced. Another important determination is the preceptible increase in width of the shadow in the second interspace between films in the upright and in the supine positions taken at the same distance, usually three feet. If this measurement is over one centimeter it can be considered diagnostic of pericardial effusion.

The mild or effevescent cases recover within one to a few days. The more severe case is sick or confined for several weeks before symptoms disappear. Return

of the electrogram and x-ray size of the heart to normal may be even more prolonged. Carmichael[1] cites one case which was prolonged clinically for seventy days. The long term outlook is good. The literature, thus far, reveals only one fatal case attributed to the syndrome by McCord and Taguche.[3] This case was thought, at first, to have a coronary thrombosis, was given dicumeral and developed excessive bleeding into the pericardial sac, dying as a result of this complication. At autopsy the pericardium was found to be thickened and adherent with multilocular cavities. The myocardium was of normal thickness, there was no dilitation of the chambers, the valves were normal, and there were subendocardial hemorrhages. Microscopically there was a fibrinous exudate on the pericardium with infiltration of polynuclear cells and lymphocytes in the pericardium and contigueous myocardium with some fragmentation of the heart muscle.

Relapse or recurrence of the syndrome is rather frequent. Carmichael[1] reports recurrence in 18% of his fifty cases. He and Levy[4] cite cases with as many as four recurrences. Recurrences are usually not as severe or prolonged as the original attack. Eventual recovery within a few weeks or months is practically assured in this syndrome. Instances in the literature of prolonged follow up of cases are somewhat meager. Levy[4] has followed seventeen cases for over two years following an attack of acute pericarditis and none had any symptoms or signs of heart disease. Carmichael[1] followed forty five cases for two or more years, nineteen of them for over five years, and none had any symptoms or x-ray findings referable to the original attack of pericarditis. Six cases showed minor EKG changes which, in only three cases, were thought probably to be referable to the original attack of pericarditis. In none of the cases of Levine or Carmichael, nor any other reported cases of the syndrome, was the evidence of constrictive pericarditis demonstrated.

DIFFERENTIAL DIAGNOSIS

Although a presumptive diagnosis of acute idiopathic pericarditis can be made early in its course, a more firm conviction must await further developments and the passage of time. It occurs in the young and old of both sexes and in white and negro races. There are many specific causes of pericarditis: acute rheumatic fever; tuberculosis; myocardial infarction; pyogenic infection including pneumonia and empyema, streptococcus infection, tularemia, uremia, lupus erythematosis; sickle cell anemia; and Hodgkins disease. All of these must be constantly thought of when one is considering the diagnosis of acute idiopathic pericarditis. In the younger age group acute rheumatic fever is to be principally borne in mind. Joint pains, previous attacks resulting in valvular disease, presence of significant murmurs and corollary signs of repeated epixtaxes and errythema nodosa are valuable sign posts. Increased PR interval in the EKG frequently occurs in acute rheumatic fever but not in idiopathic pericarditis. In the older age group when myocardial infarction is to be considered there are several helpful points of interest. The presence of fever at the onset and absence of shock makes one lean away from coronary thrombosis. The type of pain is a little different in pericarditis. It is more related to respiration and position. In coronary thrombosis the blood pressure usually falls while in pericarditis no particular change occurs. The EKG is important. The only change found early in pericarditis is elevation of the ST segment in several leads, while in coronary occlusion a Q is usually present and the ST elevation in either anterior or posterior infarction is accompanied by reciprocal depression. The T waves in pericarditis are not inverted until the ST segment has returned to the isoelectric line. Later the differentiation becomes more evident with sharp inversion of the T waves in multiple leads, without a Q wave. Tuberculous pericarditis offers a different problem. The onset is usually more insiduous and although the pain of pericarditis may be present the symptoms and signs of a generalized and pulmonary disease predominate. The cardiac findings, EKG and x-ray signs may be quite similar. There are usually concomitant pulmonary physical findings and the sputum and the pulmonary x-ray findings are most often sufficient to lead one to the proper conclusion. In a few cases only the long term view will indicate the proper diagnosis. In the other causes of pericarditis there are usually sufficient corollary findings to lead to the diagnosis although one must always keep in mind such rare diseases as lupus errythematosis.

The question of non specific myocarditis frequently enters the picture. Myocarditis is a term which was used rather loosely for many years by the profession and in the last two or three decades has become frowned upon. Saphir[5] has shown that myocarditis often occurs in relation to acute infections. In the syndrome of acute idiopathic pericarditis evidence of cardiac involvement frequently occurs. How much of the disturbances is caused simply by pericardial inflammation with pericardial effusion and how much is dependant on myocarditis is a persistent question. Carmichael et al[1] attributed the cardiac enlargement, noted in 25% of their fifty cases, to pericardial effusion in only three instances and thought that cardiac dilitation accounted for the other twenty two. However, they do not recite the important proceedure of upright and supine x-ray films and they themselves question how such a great amount of dilitation could occur without evidence of myocardial insufficiency. Several authors have assumed that the marked cardiac enlargement was not due to increased pericardial fluid because attempts at paracentesis have failed. This is not necessarily true as successful pericardial taps may be difficult. Levine[6] cites one instance where repeated unsuccessful attempts to obtain pericardial fluid by tapping anteriorly was followed by removal of 500 cc. when the needle was inserted posteriorly. There is good evidence, however, that the

condition is not simply confined to the pericardium and the contiguous myocardium. Carmichael,[1] Burchell,[7] Logue and Wendkos[8] consider that myocarditis plays a definite part in a number of cases. Supporting this idea is the fact that congestive failure, other than related to tampanard, is not infrequently seen as a part of the picture of the syndrome.

TREATMENT

Due to the considerable degree of variability in the course of this syndrome the effect of any specific therapeutic agent offers great difficulty in evaluation. Most of the authors reporting on such cases have not considered any specific treatment. Logue and Wendkos[8] tried penicillin and sulfonamides without effect. Taubenhaus and Brams[9] used aureomycin on three cases and thought the drug produced prompt relief, but they admitted that the course of the syndrome was so variable that no conclusions could be drawn from their results. One of the cases in the present series who appeared acutely ill, and had fever 103°F. and a gallop rhythm, received ACTH with prompt subsidence of evidence of disease and ran a very short course. In general the presently accepted treatment is symptomatic with the use of narcotics for relief of pain and bed rest until symptoms and signs subside. Pericardial paracentesis may be necessary at times for relief of symptoms of tampanard. In the severe case symptoms of congestive changes appear and digitalization and mercurial diuretics have been employed with excellent results. In most cases when the chest pain subsides the patient is relatively quite comfortable. The problem of enforcing bed rest may offer difficulty in a few cases and in several of our cases the patients, not being impressed with their illness have left the observation of the physician against advice.

This series of thirty nine cases in this report are from three sources—16 from the Veterans Administration Hospital, Columbia, S. C., 7 from the staff service of the Columbia Hospital, 11 from my private practice and 5 private cases of my colleagues in the Columbia Hospital and cover the years 1945-1951, figure I. In addition to my private cases approximately half of the cases from the Veterans Administration Hospital and all of the staff cases from the Columbia Hospital were observed by me. The remainder of the cases were subjected to a critical review of their hospital records. The criteria for inclusion in this group were principally a history of chest pain, specific electrocardiographic changes, absence of a specific etiology for pericarditis and in all but two cases a benign course. Pericardial rub when heard was considered diagnostically important but its absence was not disconcerting. These cases are classified arbitrarily into mild, 12— moderate, 19—and severe, 8.

The mild cases may have severe pain at onset, but the pain was of only one to four days duration, fever lasted only one to four days, the heart was not demonstrably enlarged and the patient was asymptomatic

	V. A. Hospital	Columbia Hospital Staff	Private cases	Total
Patients	16	7	16	39
Mild course	4		8	12
Moderate course	8	4	7	19
Severe course	4	3	1	8
Friction rub	2 (mild) 3	2	2 (mild) 1	10
Normal WBC	4 (mild) 10	5	3 (mild) 6	26
Leucocytosis	2	3	5 (mild) 1	11
Pulmonary infiltration	6	3	2	11
Pleural effusion	4	3	-	7
Pericardial tap	3	3	2	6

Figure I -

FIGURE I
Analysis of 39 cases of idiopathic pericarditis.

in one to seven days. Frequently the only EKG change was an elevation of the ST segment in one or more of the limb leads or the chest leads to the left, returning to normal in three to twelve days without the T waves becoming inverted.

In the cases running a moderate course, the illness with pain and fever was more prolonged. The area of cardiac dullness and the x-ray shadow became enlarged for a period varying from a week to several months. The EKG progressed from the phase of ST segment elevation to that of inversion in two or more limb leads and the chest leads to the left. This pattern did not return to normal for several weeks or longer. Evidence of pulmonary infiltration was demonstrated by x-ray in ten cases and in six cases there was a pleural effusion. Several had recurrence of the symptoms after several weeks or months.

In the eight severe cases the additional factor of myocardial insufficiency appeared. This group illustrates the type of case in which unquestionably myocarditis is a factor. Some may question inclusion of this group in the same syndrome as idiopathic pericarditis. However, clinically they do not differ from the other cases in the group of moderately severe ones other than the appearance of congestive failure. The electrocardiographic pattern was the same and the x-ray findings are quite similar. But how much of the cardiac enlargement is due to cardiac dilatation and how much to pericardial effusion was not accurately determined. Pericarditis is probably the primary factor and in addition the disease process extends into the myocardium sufficiently to produce myocarditis with resultant myocardial insufficiency. In one case, having a severe course with evidence of congestive failure, pericardial paracentesis was productive of a serosanguineous fluid. He became asymptomatic in about six weeks and the heart size became normal although the T waves were still inverted on discharge from the hospital. In no instance was tampanard thought to be the cause of the heart failure and none required pericardial paracentesis for relief. In six of these cases

the administration of digitalis and mercurial diuretics produced prompt relief of congestive symptoms and they had a salubrious course. Two cases died during the course of their illness. Unfortunately an autopsy was not obtained in either instance. The first case was suffering a relapse of pericarditis with congestive failure and died principally from hematemesis probably caused by a peptic ulcer. The second death was in a colored male, age 55 years who had a concomitant chronic urinary tract infection. During the course of his illness he developed a psychotic episode and on one occasion he jumped from the hospital window. He died suddenly and the cause of death could not be determined, but it was probably due to myocardial failure.

The following are four illustrative cases:

Case 1—J. A. R., white male, age 20 years, had suffered for eighteen hours moderate precordial pain, worse on deep breathing when seen on February 10, 1949. Temperature 99.8° F., pulse 84, blood pressure 124/84, leucocyte count 8,200. Deep breathing was painful. The lungs were clear. The heart was regular, a pericardial friction rub was heard just to the left of the sternum. EKG showed elevation of the ST segment in the chest leads only, figure II. The heart was normal

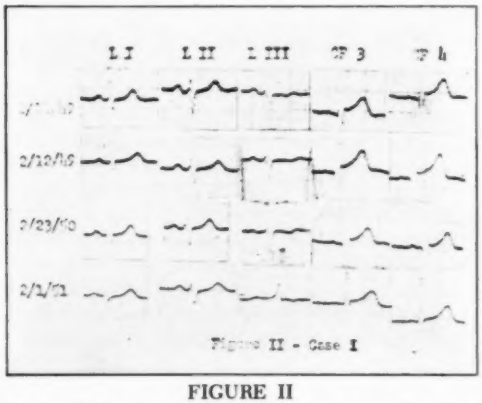

FIGURE II
Electrocardiograms of case 1 (J. A. R.), ST elevation in chest leads only.

in size by fluroscopic examination. After a narcotic he became asymptomatic and remained so and later in the day the friction rub disappeared. There was an elevation of temperature to 99° F. plus for three to four days. After six days hospitalization he rested at home for a week. At the end of that time the EKG showed only slight elevation of ST in CF 3 and CF 4 and the heart was of normal size on fluroscopic examination. He was then allowed his usual activities and remained asymptomatic. On February 1, 1950 and on October 2, 1951 the EKG and fluroscopic of his chest were normal.

Case 2—L. W. H., white male, age 40, developed

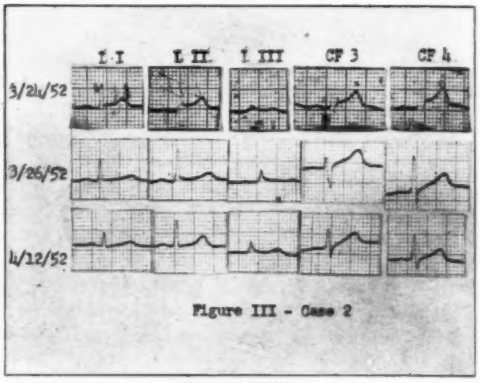

FIGURE III
Electrocardiograms of case 2 (L. W. H.), ST elevation in leads I, II and CF 3 and CF 4 with return to normal within 48 hours.

sharp pain in the right anterior chest in the late afternoon of March 23, 1952. Pain soon spread to the epigastrum, retrosternal and lower neck regions and was increased by inspiration and coughing. He was hospitalized and given morphine with relief of the pain. However, the pain returned after eighteen hours and remained for practically twelve hours when all symptoms disappeared, not to return. Temperature 99.4° F., pulse 84, and blood pressure 110/70, leucocyte count 13,600. The lungs were clear. The heart was normal in size and there were no murmurs or friction rub heard. EKG showed elevation of ST segment in leads I, II, III and CF 3 through CF 5, figure III. These changes were present to a lesser degree on March 26, 1952. By April 12, 1952 the EKG tracing was normal. The heart and lungs were normal on fluroscopic examination on March 31 and on April 12, 1952. He has remained asymptomatic.

Case 3—H. H., white male, age 43, had symptoms of a mild respiratory infection for two or three days, then developed severe precordial pain referred to both shoulders and left upper arm requiring several narcotic injections for relief, on the night of October 7, 1950, and lasting about twenty four hours. In the past he had been generally healthy and his systolic blood pressure had ranged between 100 and 120. When examined by me on October 9, 1950 he was comfortable and afebrile. The heart sounds were normal, pulse rate 88, blood pressure 110/80, leucocyte count 7,200. The EKG on October 9, 1950 showed a questionable elevation of the ST segment in leads I and II, figure IV. On October 11, 1950 there was slight but definite elevation in lead II and CF 3 and CF 4. X-ray of the chest was normal, figure V. On the nights of October 11 and 12 there was some return of the chest pain. On October 14 the ST segments were lower than on October 11. He returned to his usual activity. On November 7, 1950 there was a return of similar chest pain radiating to the left shoulder with some epigastric pain which was increased on

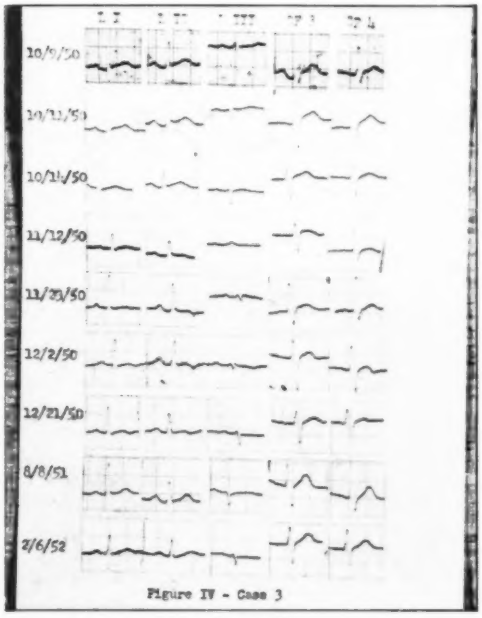

FIGURE IV
Electrocardiograms of case 3 (H. H.). Early elevation of ST segment in multiple leads with progression to inversion of T in leads I and II and later return to normal.

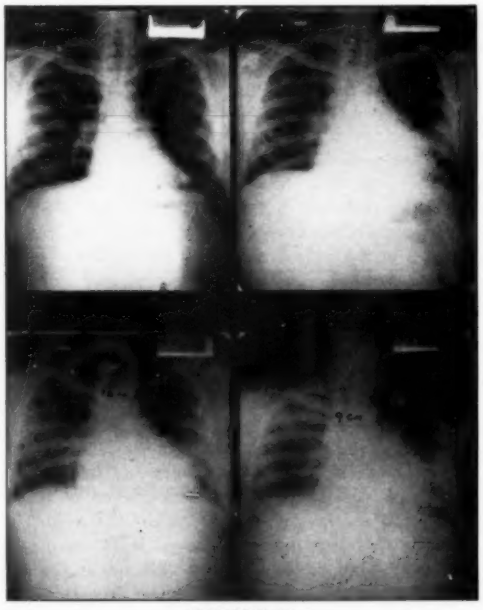

FIGURE V
Serial x-rays of chest of case 3 (H. H.). Heart of normal size on October 9, 1950 and enlarged on November 13, 1950. Erect and supine x-ray films at distance of three feet on November 13, 1950.

deep breathing. On November 12 the heart sounds were found to be distant and on x-ray the cardiac shadow was definitely enlarged, globular in shape and with increased width in the supracardiac area in the supine position, figure V. The ST segments were isoelectric but T I and T II were of low voltage. By November 23 there was low voltage of T I and inversion of T II and by December 2 inversion of T I, II, and III and CF 4, figure IV. On December 21, 1950 there was no significant change but by January 10, 1951 the EKG had returned to normal. On December 21, 1950 fluroscopic examination showed the heart shadow to be normal in size and shape. In the meanwhile the patient had only an occasional elevation of temperature of 100° F. and slight precordial pains and dyspnea. He remained in bed fairly com-

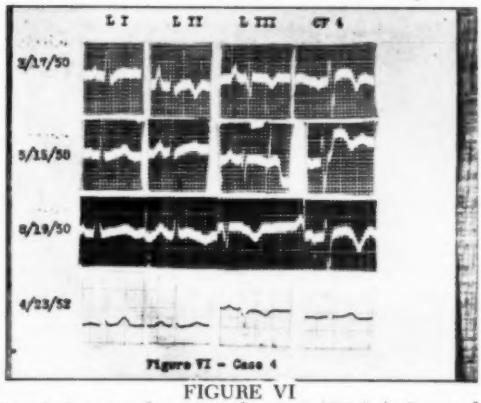

FIGURE VI
Serial electrocardiograms of case 4 (W. L.). Inverted T in leads II, III and CF 4 with flat T I on March 17, 1950. Return toward normal two months later. Recurrence of changes on August 19, 1950. Normal tracing, except for inverted T III on April 23, 1952.

fortable from November 12 to December 6 when he was allowed to be up. After January 10, 1951 he was allowed increasing activity. Since then he has had only occasional mild fleeting left anterior chest pain. Further fluroscopic and EKG examinations on August 8, 1951 and February 2, 1952 were normal.

Case 4—A negro man, age 36, had been in good health until about mid January, 1950 when he developed right upper quadrant pains followed by dyspnea. When admitted to the Veterans Administration Hospital in Columbia, S. C. on March 16, 1950 he was acutely ill with symptoms of congestive heart failure. He was afebrile, his heart was moderately enlarged and there was a soft systolic murmur over the precordium. The pulse was rapid and blood pressure was 100/76. There were many basal rales and the liver was enlarged and tender but there was no oedema of the extremities. Leucocyte count was 7,550. Sickle cell preparation was negative. X-ray showed the heart to be greatly enlarged to the left and right, figure VII. EKG on March 17 revealed a flat TI and inverted T in leads II, III, and CF 4, figure VI. The patient was treated with digitalis and showed rapid

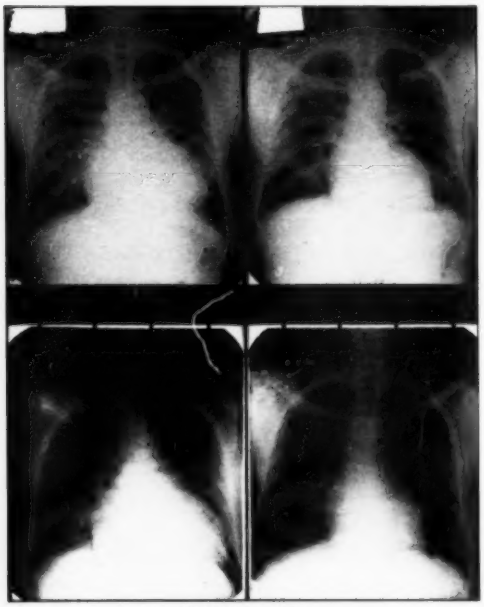

FIGURE VII

Serial x-ray films of chest on case 4 (W. L.). Heart shadow enlarged on March 17, 1950 with return to normal on May 16, 1950. On August 18, 1950 heart again enlarged and again returned to normal size on September 5, 1950.

improvement, becoming asymptomatic in four to five days. The heart was practically normal in size by March 23, 1950. The EKG also showed a return toward normal by April 6 when T II became upright. On May 15 the T waves were upright on the limb leads but inverted in CF 4. He was asymptomatic on discharge on May 15, 1950. However, on August 15, 1950 there was a return of similar symptoms and he was readmitted to the Veterans Administration Hospital on August 18, 1950. He was dyspneic, the heart was enlarged and there was a gallop rhythm. Blood pressure was 110/76. Basal rales were present and the liver was enlarged and tender. The leucocyte count was 8,000. X-ray again showed marked enlargement of the cardiac shadow, figure VII. The EKG showed a diphasic T I and inverted T in leads II, III and V 4. Again he improved on digitalis and became asymptomatic within a week. X-ray on August 22 showed a decrease in the size of the heart shadow and on September 5, the heart was normal in size. The EKG showed a return toward the normal. He was discharged on September 15, 1950.

Since that time he has worked regularly as a driver for an auto company. He has had some minor, fleeting left chest pain but no dyspnea on ordinary exertion. He had taken digitalis daily to April 10, 1952. When re-examined on April 23, 1952 he was asymptomatic, the heart sounds were clear, pulse rate 72, and blood pressure 138/92. On fluroscopic examination the left ventricle appeared rounded but the heart size was within normal limits and the EKG was normal, figure VI.

DISCUSSION

Among the 39 cases, 28 were male, 11 female, 23 white and 16 negro. The youngest was a white male, 20 years old, the oldest a white woman of 77 years. Fifteen cases were forty years of age or older and a number of these were naturally suspected of having coronary insufficiency or thrombosis at the onset. Thirteen cases had their onset during the winter months, twelve in the spring, five in the summer and nine in the fall. Follow up on most of the cases has not been adequate but four private cases followed for over two years have remained free of cardiac symptoms, two for five years or more. None of the survivors in the group are known to have retained any evidence of permanent cardiac symptoms. Two of the cases were thought to show evidence of fixation of the electrical axis of the heart. Auricular fibrillation was the only arrhythmia noted in this series and occured in only one case which was severe. It is of interest to note that the woman of 77 years (A. F.) seen in June, 1947 had a moderately severe course with severe substernal pain at onset with dyspnea and temperature of 102° F. to 103° F. for over two weeks. The electrocardiograms and x-rays were typical of pericarditis with effusion. Pericardial tap produced 150 cc. of serosanguineous fluid. She recovered symptomatically in a period of six weeks and at the end of ten weeks the heart was normal in size and the EKG was normal. At the last communication with her on April 3, 1952 she was well and quite active.

During the same period of time that these cases of idiopathic pericarditis were observed, it is of interest to note that at the Veterans Hospital in Columbia, S. C. there were five cases of tuberculous pericarditis, one case due to tularemia, two cases due to a purulent organism, one case of myxedema heart with a large pericardial effusion but without evidence of pericarditis by electrocardiogram, and one case of liomyosarcoma of the right auricle with pericardial effusion. One case, not included in the series, ran a course similar to benign pericarditis but because of accompanying symptoms of arthralgia it was thought that acute rheumatic fever might be the etiology. In the Columbia Hospital staff gronp there was one case of indeterminate etiology with congestive failure and pericardial effusion whose EKG tracings failed to show typical changes and was not included in this series. One case originally thought to have benign pericardial effusion later showed evidence of tuberculosis. There was one case of sickle cell anemia at the Columbia Hospital who showed EKG changes of pericarditis and who on autopsy showed in addition to other findings of sickle anemia a serofibrinous pericarditis. It is interesting to note that a higher percentage of mild cases, eight among sixteen, occured among those seen in private practice. These cases received earlier medical care than the other groups and had

lessened morbidity probably because of this fact. Or it may be that only the more prolonged cases admitted themselves to the other type of services. But in general from a review of this series of cases it appears that those individuals who received bed rest promptly after the onset of chest pain ran a much shorter course of illness. However, this is not absolute as several cases who had prompt bed rest ran a course of several weeks. No other helpful deductions as to treatment could be determined in this group of cases although penicillin and aureomyecin were used in a number of instances. As previously noted, one case (J. F.) who appeared acutely ill with a pericardial friction rub, pulse rate 140, temperature of 103° F. and a gallop rhythm, recovered promptly after being given ACTH. In the severe cases that developed congestive failure, digitalis and mercurial diuretics were quite helpful.

CONCLUSIONS

What is usually called idiopathic pericarditis is probably not a clinical entity but may have a varied etiology. The diagnosis should be suspected early, by the presence of chest pain increased by respiration and position; possibly prior respiratory infection; fever; electrocardiographic changes of an elevated ST segment in multiple leads progressing, in other than the mild cases, to sharp inversion of the T waves in one or more of the limb leads and the chest leads to the left, without the presence of a Q wave; and the development of x-ray evidence of an enlarged heart. A confirmed diagnosis must await the passage of further time and close observation. Other more specific forms of pericarditis and pericardial effusion must be always kept in mind. As soon as possible the differentiation from a myocardial infarction should be made due to the difference in prognosis. The increased heart size is probably produced largely by pericardial effusion. The course of the syndrome is quite variable but a high percentage of cases have a duration of illness of only a few days. Myocarditis is most certainly a factor in the severe cases where congestive failure occurs. In those cases who show evidence of myocarditis with congestive failure digitalis and mercurial diuretics are helpful. Other than bed rest and narcotics for relief of pain no other therapy has been shown to be of value. The ultimate prognosis is usually good. Although the few reported fatalities have been related to complicating circumstances and diseases, the severe cases with myocarditis do offer danger to life.

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CANCER

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ERYTHEMA ELEVATUM DIUTINUM

A CASE REPORT

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Edited by JOHN C. HAWK, JR., M. D.

(Editor's Note: This month we depart from our usual custom of presenting a general or review article in order to give a case report of an unusual condition for which new and previously unreported modes of therapy have been tried, but without success.)

There exists a nondescript group of conditions, characterized in common by some degree of proliferative or lymphoblastomatous change, about whose origin and nature, whether neoplastic or inflammatory, there remains considerable doubt and controversy. Included in this group are Hodgkin's disease, the leukemias, lymphosarcoma, mycosis fungoides, Kaposi's idiopathic hemorrhagic sarcoma, and erythema elevatum diutinum. A case has recently been encountered by the authors which has features of both of the latter two conditions and which seems of sufficient interest to be worthy of a case report.

Multiple idiopathic hemorrhagic sarcoma was described by Kaposi[1] in 1872 as a relatively benign vascular connective tissue growth, which usually appears in multiple lesions on the extremities, especially the legs, but in many instances may also involve the mucosae, lymph nodes, and viscera, and after a pro-

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tracted course may result in death. The etiology of this disease is entirely unknown, although some consider it a form of vascular neoplasm. Men are affected more often than women, generally after the fourth decade of life. The early lesions appear on the hands and feet as red, purple, or blue-black nodules of a rubbery or firm consistency. These lesions may be either poorly defined or discrete and may coalesce into plaques. Vesicles and bullae due to lymphedema may occur. Later, nodules may appear on the face, ears, trunk, buccal mucosa or other areas. The lesions may suggest granulomata, angiomata, or neurofibromata. The course of the disease is slowly progressive, new nodules developing, and gradually leading to marked and slowly progressive enlargement of the extremities, lymphedema and malodorous ulceration. There may be periods of remission. Nodules may be moderately tender, but they cause no severe discomfort until the terminal stages when the parts are swollen and ulcerated. Leukemia, mycosis fungoides or true sarcoma may develop in some cases.

Erythema elevatum diutinum was first described under this name by Crocker and Williams[2] in 1894, although Hutchinson[3] probably furnished the first descriptions of typical instances of this disease some years earlier. Erythema elevatum diutinum is a persistent type of annular erythema resembling granuloma annulare and believed by some to be a clinical entity. The lesions are elevated, flat, purplish plaques, which occur most often over the joints of young women. The lesions are symmetrical, being located definitely over points of pressure and are highly colored. The histologic picture is that of vascular hyperplasia with infiltration of polymorphonuclears and eosinophiles, but usually no necrosis. This is a very rare disease, and while it is thought to be a part of the erythema multiforme and granulome annulare groups, nothing is definitely known of its exact cause and classification.

Case Report: R. M. S., a Caucasian male, age 38, was first seen by one of the authors (J. v. d. E.) in January, 1949 with a bizarre eruption, present for two and a half years. Plaques of livid purplish color, elevated, firm and very tender had begun to appear on the elbows and knees in the summer of 1946, and during the following year had spread gradually to involve the dorsum of the hands and the dorsal and plantar surfaces of the feet. These lesions had become so tender that the patient had difficulty in continuing his work. A series of injections of bismuth had been given previously. Finding of fungi in plantar vesicles had caused confusion as to the etiology of the pedal dermatitis.

The disease was described in January, 1949 as follows: "An eruption of annular, elevated, firm, red to purple, livid nodules and plaques on the dorsum of the hands, on the heels and dorsum of the feet (the lesions on pressure areas showed markedly verrucous surfaces) and heavily distributed over the nates and posterior thighs. One lesion is evident on the right postauricular area." It was felt that Kaposi's sarcoma, sarcoid, xanthoma, erythema elevatum diutinum, and all of the granulomas and lymphoblastomas had to be considered in the differential diagnosis. A biopsy was taken and pathologic study revealed a chronic inflammatory reaction with conspicuous vascular proliferation. Within the corium were lymphocytes, mononuclear cells and eosinophiles which were closely related to angiomatous accumulations of blood vessels. The inflammatory process often involved the vessel walls so as to constitute a subacute arteritis. The angiomatous proliferation did not appear sufficiently active to justify a definite diagnosis of Kaposi's disease. Subsequently, large vesicles and bullae developed on various parts of the body and were thought possibly to denote pemphigus, erythema multiforme or acute lupus erythematosus.

The patient was treated conservatively with tocopherols and local soothing applications for two months without improvement. Some of the verrucous lesions on the feet were given x-ray therapy (1000 r, 86 K.V., 5 M. A., 15 cm. TSD, no filtration) with no result except the development of temporary sensitiveness. This was contrary to the response expected of Kaposi's disease.

Following March 16, 1949 the patient was not seen by the authors for a year and a half, but during this time he was studied in various dermatologic offices and clinics from Florida to North Carolina. Several pathologists felt that the picture was definitely one of Kaposi's hemorrhagic sarcoma, while others felt that the picture was that of erythema elevatum diutinum. In May, 1949 he was carefully studied in the Duke University Clinic. All laboratory studies were reported within normal limits. Biopsies taken at this time were again viewed with much disparity of opinion. During this period treatment included several full series of penicillin injections, several courses of fever therapy, and two weeks of ACTH in doses of 100 mgm. daily, all without any demonstrable improvement.

On October 30, 1950 the patient was admitted through the Medical College Cancer Clinic to Roper Hospital for further study. At this time, in addition to the lesions on the extremities, he was noted to have groups of maculo-papular, dull, brown-red annular lesions over the trunk. Hematologic studies were of interest in that he was found to have a 15% eosinophilia with a total leukocyte count of 6,600 per cu. mm. Urinalysis and serology were negative. X-rays of the chest, hands, and feet were essentially negative. Biopsies were taken of both an old lesion and one of recent origin, and again histologic differentiation between Kaposi's disease and erythema elevatum diutinum could not be made with certainty. An axillary lymph node was histologically normal. A tracer dose of 200 uc. of radioactive phosphorus (P^{32}) was given

and showed fairly good localization in the lesions. However, the decision was made at this time not to give a therapeutic dose of the radioactive material and the patient was discharged, to be followed in the Cancer Clinic. He was subsequently given chloromycetin for two weeks, but tolerated the drug poorly and received no benefit from it.

He was not seen again at the Cancer Clinic for about one year. In October, 1951 he was presented at the meeting of the Baltimore-Washington Dermatological Association where erythema elevatum diutinum was accepted as the most likely diagnosis. In November, 1951 the patient was brought back to the Cancer Clinic for admission to Roper Hospital for the specific purpose of study and therapy with radioactive phosphorus. At this time the patient complained of extreme sensitiveness to cold and wore gloves for protection. Hemogram was normal, with no eosinophilia. Both an elevated and a flat lesion were excised for histologic study.

All pathologic material was reviewed and certain persistent histologic changes were found in all the biopsies which were most fitting to erythema elevatum diutinum. These consisted of nodular accumulations of hyperplastic blood vessels surrounded and infiltrated by inflammatory cells in which polymorphonuclear leukocytes were predominent (Figure 1). The vessels, although of capillary and arteriolar size, had conspicuously thickened walls due to splitting or reduplication of their collagenous fibrillae and marked swelling of their endothelial cell linings. (Figure 2). Polymorphonuclear leukocytes were often present at all depths within the vessel walls and degenerative changes with early necrosis could occasionally be detected. Eosinophiles were sparsely scattered through all sections.

The close proximity and actual infiltration of the proliferating vascular channels by polymorphonuclear leukocytes is often considered typical of erythema elevatum diutinum.[4,5,6] This is certainly an outstanding feature in the case herein presented. The absence of any depositions of blood pigment, the thickness of the walls of blood vessels and the absence of any true neoplastic type of vascular proliferation all speak against Kaposi's sarcoma.

A tracer dose of radioactive phosphorus (P^{32}) again showed selective absorption by the lesions and therefore a therapeutic dose of 6 mc. of P^{32} was given on November 17, 1951. Biopsies taken two days after administration of P^{32} were studied by radioautographic techniques but provided no further information as to the nature of the lesion. After discharge the patient was followed by his family physician with frequent hematologic studies and showed no evidence of bone marrow depression.

On January 3, 1952, approximately seven weeks after administration of the radioactive phosphorus,

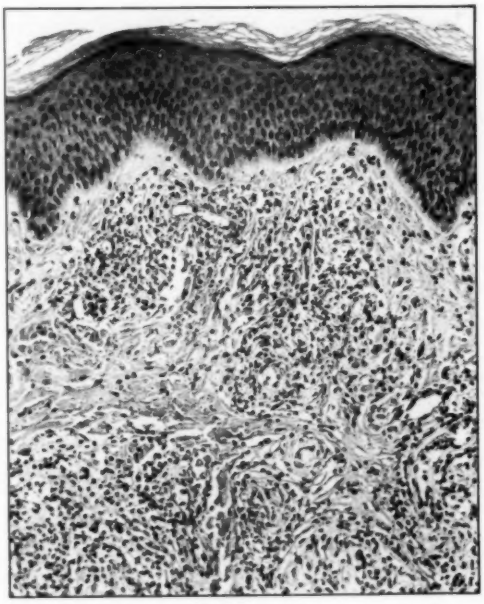

FIGURE I

Nodular accumulations of hyperplastic blood vessels within the dermis which are extensively infiltrated by polymorphonuclear leukocytes. Hematoxylin and eosin, X150.

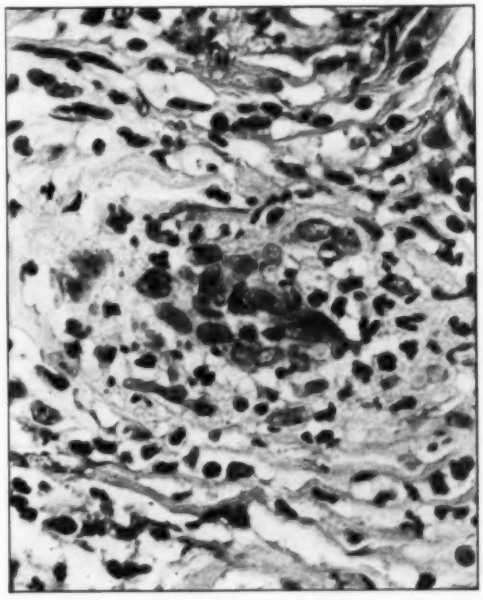

FIGURE II

Blood vessel showing swollen endothelial cells, degenerative changes in its wall and infiltration by leukocytes. Hematoxylin and eosin, X650.

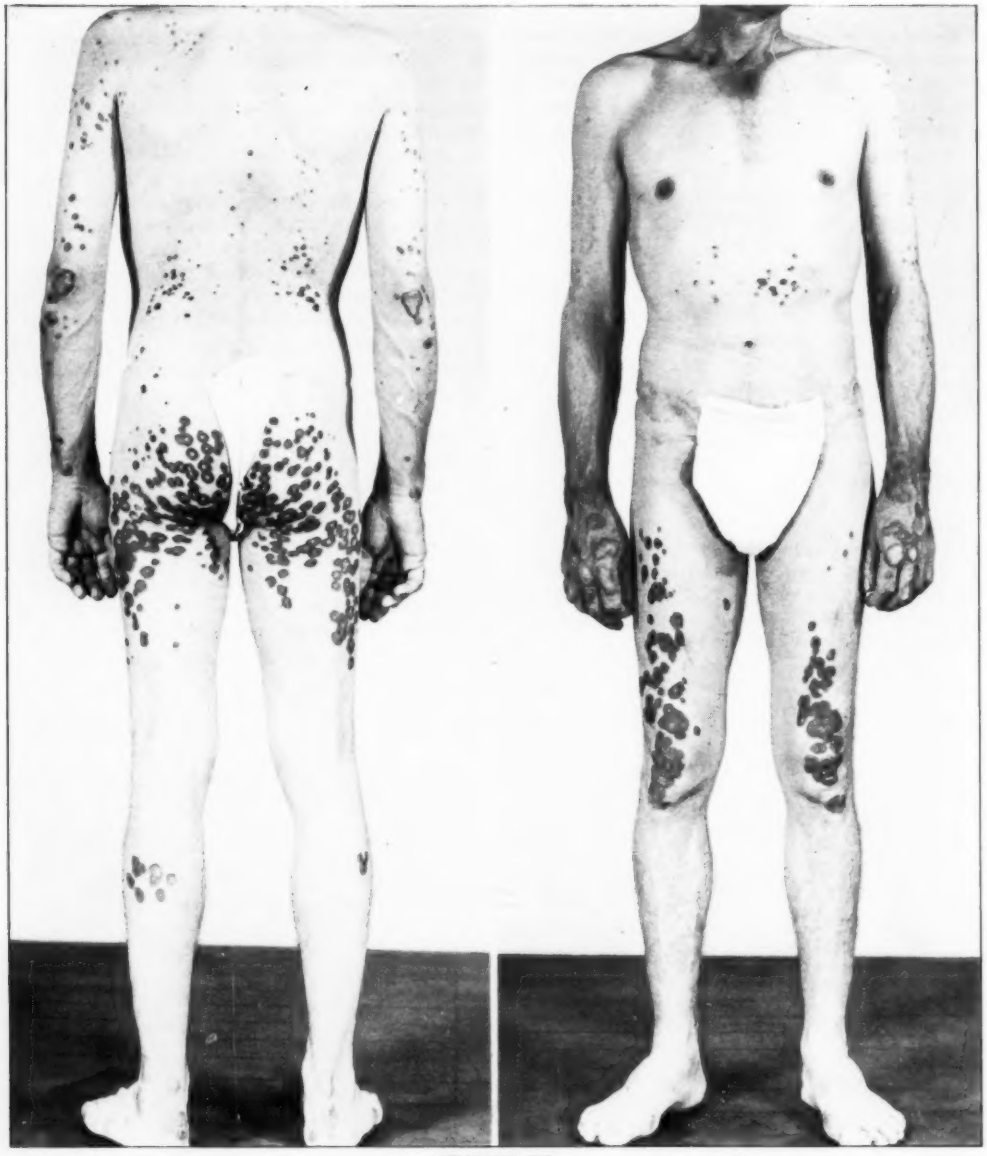

FIGURE III

the patient returned to the Cancer Clinic stating that two weeks previously he had developed burning epigastric pain and ten days previously had vomited flecks of blood. He had noted an icteric tint to his skin at that time and thereafter his urine had become dark and his stools light in color. Examination on January 3, 1952 showed the patient to be moderately icteric. The liver was enlarged 3 cm. below the right costal margin and was tender. Rectal examination revealed clay-colored feces which gave a negative test for bile. Radioactivity counts showed definite retention of radioactive phosphorus in the lesions, even after seven weeks, with at least a 2:1 differential between counts obtained over lesions and those obtained over normal skin. A gastro-intestinal x-ray series showed a small duodenal ulcer. It was felt that the patient also had either acute hepatitis or obstructive jaundice from inflammatory reaction associated with his ulcer, and therefore he was admitted to the Roper Hospital for treatment. Laboratory studies on admission: RBC 4.86 million; hemoglobin 14 gm.; WBC 5,300; differential count—PMN's 36, lymphocytes 53, eosinophiles 8,

monocytes 3; serum bilirubin 1.2 mgm. %; cephalin flocculation 3 plus; prothrombin concentration 82% of normal.

In the hospital the patient was placed on a modified ulcer regime, and improved symptomatically. His jaundice gradually subsided and liver function tests indicated a return to fairly normal function. A gastrointestinal x-ray series on January 22 showed healing of the duodenal ulcer. The possibility that his jaundice was due to hepatitis from the toxic effects of radioactive phosphorus was entertained but could not be proved. The patient's skin lesions showed no improvement with radioactive isotope therapy. Sensitivity to cold was marked, and the patient required heating pads for relief. The possibility of simultaneous existence of both Kaposi's disease and erythema elevatum diutinum was considered at this time.

The patient was discharged from the hospital on January 31, 1952 on a convalescent ulcer regime, and was seen in the Cancer Clinic one month later, at which time there was no evidence of jaundice, and liver function was good as determined by absence of bromsulphthalein retention. His liver was still slightly enlarged but was not tender. His cutaneous lesions remained unchanged.

He returned for admission to the Roper Hospital on May 29, 1952 for a trial of therapy with hydrocortisone (Compound F). The appearance of the lesions at this time is depicted in Figures 3-5. The symmetrical distribution of the lesions, characteristic of erythema elevatum diutinum, is clearly shown in

FIGURE IV

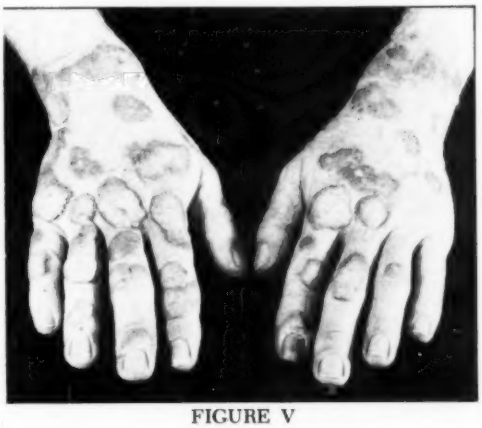

FIGURE V

Figure 3. Figure 4 illustrates, in a close-up view of the buttocks, the flat, macular type of lesion, while Figure 5 shows the elevated lesions present on the hands.

Hydrocortisone, 2.5 mgm. in 0.1 cc. of solution, mixed with an equal volume of 1% procaine hydrochloride, was injected into and around each of eight lesions on the hands and feet. Temporary pain resulted, but was not incapacitating. When seen one week later, there was no demonstrable change in the lesions, but the follow-up period is, of course, too short to permit proper evaluation of the results.

SUMMARY AND COMMENT

A case has been reported which exhibits characteristics of both Kaposi's hemorrhagic sarcoma and erythema elevatum diutinum but which is now believed to represent the latter condition. At the time of publication the patient continues with his disease unchanged by all efforts at therapy. Rutin, vitamin C, various antibiotics, fever therapy, ACTH and radioactive phosphorus have failed to influence the disease in any noticeable manner. Hydrocortisone (Compound F), given by local injection into the lesions, has produced no immediate improvement, but full evaluation of the effect of this agent must await a longer follow-up period.

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JULY, 1952

N. B. HEYWARD

On June 3, 1952, death came to Dr. Barney Heyward in a manner as he would have wished it, swiftly, without warning and in the midst of vibrant energetic living. With his passing there ends a career of medical service to mankind, professional fellowship, and gracious living that reached heights obtained by few.

Following graduation from medical school at the College of Physicians and Surgeons in New York City, in 1913, Dr. Heyward began the practice of medicine in Columbia, the city of his birth. For thirty-nine uninterrupted years he continued this practice in the field of internal medicine.

To the medical profession he was an accepted leader, with clear thinking and considered judgment; to his patients he was not only a medical advisor, but a true friend with a rare capacity for tact and understanding.

He served medicine not only as an able practitioner but in several associated ways as well. As a member of South Carolina State Board of Medical Examiners for twenty-five years and as secretary to this Board for nine years, through his untiring efforts in this difficult position, the work of selecting proper physicians for South Carolina developed into a smoothly functioning efficient system. Hundreds of South Carolina doctors will remember his kindly advice while taking the State Board Examinations.

In organized medicine also, Dr. Heyward was an outstanding figure. He was intensely interested in the activities of the Columbia Medical Society of which he was president in 1923. As secretary of the South Carolina Medical Association during the last two years of his life he worked constantly for what he felt was in the best interests of his fellow physicians.

But Dr. Barney lived no narrow life of medicine alone. A friend of his once said, "he is one of the few men with the ability and sense to live life as it should be done." He was a devoted husband, father, and grandfather who insisted that nothing should intrude on his opportunities for spending time in a happy family circle, loving and living together as should be.

Athletics too shared in the many interests of his life. First as a participant on a University of South Carolina football team, for a number of years as University of South Carolina and team physician, later as an ardent supporter and spectator. As was the spirit and nature of the man, all athletic efforts deeply interested him, particularly football and boxing at the University of South Carolina. It could almost be said that nothing would keep him from one of these contests were it not for another interest which at times superceded all other considerations, hunting and especially swamp hunting.

"Doves in a brisk wind-grand,
Birds behind good dogs—elegant,
Ducks at dawn—wonderful,
But turkey hunting—why man, that's postgraduate hunting!"

With boundless energy and ever eager enthusiasm Dr. Barney was one of the truly great hunters of all time.

An excellent doctor, a loving father, a charming gentlemen, a perfect friend, and a real man—surely this world needs more men like Barney Heyward.

W. C. C.

A. M. A. HOUSE OF DELEGATES

Several matters evoked considerable discussion at the recent meeting of the House of Delegates of the A. M. A. in Chicago and important decisions were made, decisions whose impact will be felt for years to come.

The President's Commission on the Health Needs of the Nation. Without dealing with any personalities, the House of Delegates endorsed the opinion of the Board of Trustees and of its officers that "there is adequate evidence to establish that it was created for the purpose of removing a very troublesome issue from public consideration during an election year." The House of Delegates backed up the Board of Trustees in its denouncement of the political purposes which lie back of the Commission's work.

Osteopaths. The problem of osteopaths is becoming acute in many sections of the country, particularly in those rural areas of certain states where up to 25%

of the medical care is being rendered by these individuals. The day before the House of Delegates met, newspapers carried the story of the difficulties which had arisen in Bay City, Michigan, where the City Council, faced with a petition signed by 5,000 citizens, had ordered the wards and private rooms of the city hospital made available to the patients of osteopaths. As a result, doctors of medicine were moving their patients to another hospital.

The ideas and opinions presented on this problem were varied. At the one extreme were those who thought every effort should be made to elevate osteopaths to a place where they would be eligible to attain the status of doctors of medicine. At the other extreme were those who advocated having nothing whatever to do with the cultists.

It was a problem too difficult to solve with information at hand and a special committee was appointed to study the whole matter and to report back to a subsequent meeting of the House.

Social Security Benefits. On May 19, the Ways and Means Committee of the U. S. House of Representatives introduced an omnibus bill with regard to Social Security benefits. Section 3 dealt with a phase of permanent disability and spelled out detailed powers of administration for the Social Security Administrator. An effort was made to introduce this under a suspension of the rules which would have done away with the possibility of hearings. Through the efforts of the American Medical Association and others, this was defeated. During the meeting of the House of Delegates information was received that the Bill would again be introduced with the specific powers of the Administrator deleted, but with power left with him to set up the rules of administration.

The House of Delegates adopted a strong resolution condeming "the breach of faith by this Administration with those who would benefit from this Bill in a flagrant attempt to railroad through a provision to aid in the socialization of medicine, which would not possibly be adopted if considered openly and farily," and urged that "Congress rerefer this Bill to the Committee where it should be subject to the ordinary Democratic processes of legislation."

Subsequent events have shown that this resolution failed in its purpose and the Bill was passed by the House of Representatives on June 18.

Negro physicians. A resolution was introduced by the delegates from N. C. asking that the North State Medical Society (which is composed of physicians, dentists, and pharmacists) be recogined as an affiliate society of the N. C. Medical Society and of the A. M. A. The resolution was not adopted on the grounds that it was not constitutional. It was further brought out in the general discussion that the question of negro physicians gaining membership in county and state societies was one which had to be worked out at the local level. The plan which we adopted here in S. C. was discussed and highly commended.

New officers. Dr. Louis Bauer of New York was installed as President and his inaugural address, which was carried by two radio networks, was a dynamic and fighting speech. Dr. Ed. McCormick, a surgeon of Toledo, was selected as President-elect, winning out over Dr. Frank Borzell. Dr. James Reuling of New York was elevated to the position of Speaker of the House of Delegates ,and Dr. Vincent Askey of San Francisco was chosen as Vice-speaker.

Future meetings. The annual sessions (June) will be held as follows; 1953—New York, 1954—San Francisco, 1955—Atlantic City. The interim session (December)—1952—Denver, 1953—St. Louis.

JOHN CLINE SPEAKS

At the opening session of the House of Delegates of the American Medical Association, the retiring president, Dr. John Cline, delivered his address. It was a comprehensive and masterful presentation of the observations which he had made while in office.

We present herewith some of the striking statements in his speech. They should be of interest to all, but particularly to those who were privileged to meet and hear Dr. Cline when he visited in South Carolina last year and appeared before physicians in Columbia, Greenville, and the Pee Dee.

ADDRESS OF THE PRESIDENT
JOHN W. CLINE, M. D.
To the House of Delegates
June 9, 1952

The past year has been busy and somewhat strenuous for your President. It has carried me to many states and all parts of the country.

It has been gratifying to observe the growing unity and increasing vigor of the profession. The degree varies in the different states but the trend is apparent everywhere.

The past year represents one of great achievement in medicine. There have been important additions to our scientific knowledge and we have learned to reduce farther the latent period between the establishment of scientific fact and its practical application in diagnosis and treatment. Rapid dissemination of information by means of meetings and publications and the increased cooperative effort by investigators in common and differing fields have contributed to this process. Scientific medicine now is coordinated to a degree never previously attained.

Medical education at all levels—undergraduate, graduate and postgraduate — has continued to improve. Graduate education has suffered to some degree as a result of defense mobilization and we must plan now to provide opportunity for those in the Armed Forces to complete their training when returned to civilian life.

Perhaps the most significant advance is to be found in the field of postgraduate education. More planned postgraduate courses have been offered and, in some instances, these have been carried to the physician in his home community. The attendance at meetings which have been better organized and of high quality, has increased.

Medical care has increased in quantity as well as in standards. The American people enjoy more abundant and better medical care than ever before.

The ratio of physicians to population has increased and there is better distribution of doctors. Improved transportation, better facilities and greater use of auxiliary personnel have permitted the physician to make better use of his time and render better care to more people over a wider area.

The interest of medical students in general practice and in rural practice has been fostered by the medical schools, the state associations and the American Medical Association. These efforts coupled with the placement agencies of our state and national organizations and the increased assumption of responsibility by local communities for providing medical care, have resulted in placing many physicians in areas in need of their services.

Until comparatively recently inducing physicians to locate in places needing them was considered to be solely the responsibility of the profession. It now has been demonstrated that young, well-trained physicians will go readily to communities in which they are able to practice medicine of the high quality learned during their medical school and hospital years. They will remain if the community will avail itself of their services throughout the year and if living conditions and educational facilities are adequate to provide satisfactory surroundings in which to raise a family.

There are abundant examples of success in obtaining and holding physicians when the community undertakes its portion of the burden of improving the facilities for practice and providing adequate educational opportunities for children. These serve to focus attention upon certain essential aspects of community life.

Plans for protection against the costs of illness have grown and improved during the past year. More than 85,000,000 Americans now have Blue Cross or other hospital coverage, 65,000,000 have surgical and 28,000,000 medical and surgical protection.

During the year, additional millions of Americans have enrolled in these programs, demonstrating that American problems can be solved by American methods and far more successfully than by resorting to government for a partial solution restricted within the rigid framework of legislation.

The multiplicity and elasticity of our plans stimulates experimentation and encourages the orderly process of evolution. This ultimately will provide us with a plan or plans which will be generally recognized as the most nearly ideal for our people.

The plans for prepayment have undergone considerable development in the past year. Coverage against economically catastrophic illness has become more general. Individual coverage is more available and experiments in covering the aged are under way. The rural population has wider protection. More must and will be done in these areas as time passes. Gaps have existed and some still exist but these are being closed.

Over the country one finds variation in the interest of the profession and the backing it gives to the voluntary insurance program. On the whole it is good and is improving.

The voluntary plans fill a great need an render a great service to our people. On this basis alone they deserve our full support. Unquestionably they are far from perfect and defects exist in some plans. Where changes are needed let us strive to bring them about in a constructive fashion.

Destructive criticism and withholding support and cooperation interfere with proper development and damage the entire program. Injury to the voluntary movement would jeopardize our future freedom.

Opinion is almost unanimous that a strong and successful voluntary insurance program is our greatest bulwark against the socialization of medicine. This opinion is held by many of our friends in other fields of endeavor and in public life. It is shared by those who would destroy the high standards of American medicine by placing it under bureaucratic domination. Some of these belittle the accomplishments of the program and some have tried to interfere with its development because they realize that it stands as a barrier against the accomplishment of political medicine.

We have recognized and accepted our responsibilities to provide the American people with medical care of continuously improving quality and to make that care more easily available to all. We must continue our efforts.

On the other hand, there is also growing recognition of a coexistent responsibility on the part of the public. It has been said that the plans for extension of medical care are solely the responsibility of the medical profession. It is essential that the public, the plans and the hospitals assume their portions of the burden. The provision of medical care is not a one-way street and others must meet their obligations as well.

In the course of twenty years of dealing with medical problems on the local, state and national planes, I have watched these problems multiply and become more complex at all levels. As medical care and health have become more prominent in the minds of the people this change has been inevitable. As public interest has increased in these matters, we have come more closely under public scrutiny. As medical affairs have become more important our relations with other

groups have become more important and the operations of the American Medical Association have become more important.

These activities have been strengthened in many ways. A large number of individuals have been responsible. They are too numerous even to mention at this time although I have drawn attention to some of their activities during the year through the medium of the President's Page. The headquarters staff consists of almost nine hundred loyal, hard-working employees distributed in twenty departments. With the exception of the purely organizational departments, all are working full time directly or indirectly in the public interest.

I cannot allow this opportunity to pass without paying my respects to our calm, efficient and extremely able Secretary and General Manager, Dr. Lull, and to his very capable, energetic and loyal assistant, Dr. Howard, who direct the staff. During the past year numerous changes have been made in the interests of more efficient operations.

The quality of The Journal has continued to improve under the admirable direction of the Editor, Dr. Austin Smith. In my travels about the country I have heard many compliments, few criticisms of The Journal and almost unanimous approval of the changes he has instituted. J. A. M. A. has increasingly justified its reputation as the most highly respected and most widely read medical journal in the world.

The Board of Trustees is composed of fine, sincere and able men who labor arduously and with serious purposes dealing with the many matters demanding their attention. As the problems of medicine have multiplied the agendas have increased in length. It is only by close application to its work, under the capable and efficient direction of its splendid and devoted Chairman, Dr. Murray, that it is able to perform the many tasks assigned to it. I wish to express my deep appreciation to the Board and its Chairman for the excellent record of accomplishment of the past year.

To you, the members of the House of Delegates, I wish to express my compliments and my appreciation of the character of your deliberations. In your meetings you have considered and debated many matters. The serious responsibility of determining the basic policies of American medicine is yours. The decisions you make and the methods of expressing them are of great importance. The thought, diligence and care you have devoted to your transactions have clarified the position of medicine and have built well for the profession.

During the past year more attention has been paid to the relationship of medicine to other professions. The association with other groups concerned with the care of the sick has become closer. Problems still exist in certain areas of contact but progress has been made and is being made in dealing with them. Some will require long periods for complete solution.

No problem is too difficult to solve if patient men of good will approach it in a spirit of cooperation. An excellent example is the successful conclusion of the negotiations in the establishment of the Joint Commission on Hospital Accreditation.

The medical profession and the hospitals are interdependent. What affects one affects the other. There is growing concern over mounting hospital costs and the hospitals have been unduly criticised because of them. We can do much to dispel misconceptions by explaining to our patients the reasons for this situation. About 65 per cent of hospital costs are attributable to salaries and wages. As scales of compensation have risen, costs have risen correspondingly. In addition every item which the hospital must purchase is more expensive due to the spiral of inflation which involves our entire economy.

On the other hand, certain hospitals continue to engage in the practice of medicine in defiance of established principles and in contravention of the law in most states. There is, I believe, widening recognition by hospitals that the practice of medicine is the practice of medicine whether performed within or without the hospital. We recognize the right and the necessity for hospitals to derive income from certain departments staffed by physicians and ethical arrangements have been worked out whereby the rights of all concerned are respected. The hospital must not become dominant in the practice of medicine. This appears to be the objective of a small minority of administrators and trustees.

The curricula of modern osteopathic schools now are patterned largely after those of schools of medicine. The level of education provided by some has improved since the conclusion of the last war. There have been recent discussions between a committee of our Board and a similar group of the American Osteopathic Association. The representatives of the osteopathic profession express a desire for our assistance in further improving the education of students in osteopathic schools. In thirty-odd states the licenses granted to osteopathic physicians approach or approximate, for practical, legal purposes, those granted to doctors of medicine. We cannot accept or recognize the basic concept of osteopathy as a valid method of treatment of disease. The osteopathic profession apparently appreciates that fact as evidenced by the progressive reduction of the emphasis upon the teaching of osteopathy in favor of instructions in medicine and surgery. Removal of the stigma of cultism would hasten that process.

It is my considered opinion that the Council on Medical Education and Hospitals should be permitted to aid and advise schools of osteopathy and that we should facilitate the opportunities of these schools to

improve their faculties by removing any barrier of unethical conduct on the part of doctors of medicine who may teach in these schools. I recommend that the House take action to implement these suggestions.

We must continue to strive for greater cooperation between medicine and the dental, nursing and pharmaceutical professions. Closer relationship will work to the advantage of all.

The public relations of medicine have improved but much remains to be done. In one sense, the esteem in which medicine is held by the public is the total of the patient-physician relationships of the entire country. The good deeds of the ninety-five per cent or more of the profession go unnoticed and are taken for granted. The transgressions of a very small proportion of physicians do untold harm to the entire profession.

Our Code of Ethics is not a body of law but is a pattern for conduct. In a sense it is the code of the gentleman in the practice of medicine. Even if it did not exist it would not be violated by many because the vast majority of our members are gentlemen.

We have long recognized and subscribed to the dual obligation of the physician to his patient: To render to the patient the best possible medical care and to deal fairly with him in all ways. Unfortunately there are a few of our colleagues who do not respect these obligations.

When these are encountered they must be thrust from the company of gentelmen. There can be no compromise with dishonesty or unethical conduct. We owe forthright action not only to the public but to ourselves. Respect, to be maintained, must be deserved.

Grievance committees have gone a long way in improving the situation but the mere existence of such committees is not enough. They must be composed of physicians who are respected, not only for their professional attainments but, also, for their character, impartiality and courage. These committees must be active, easily available and the public must be informed of them and the means of access to them.

These provisions will do much to inspire public confidence. The work of these committees can be greatly reduced if the physician will discuss all aspects of his services to the patient at the outset of his contact with him. This procedure will reduce misunderstandings to a minimum and since most complaints against the profession are based upon misunderstanding these will be greatly lessened.

There also has been a great change in the public position of medicine. Medicine and the American Medical Association had been subjected to years of the most vicious, systematized campaign of vilification ever waged against a respectable profession and organization devoted to the public interest. We were not prepared to meet these onslaughts. You all recall vividly the situations which confronted us in December 1948.

Conditions have changed. We are stronger, more unified and are better able to prevent the destruction of the high standards of medical care inevitable in socialistic schemes of its administration. Medicine has become a significant force in American life.

The vigorous support of physicians and others throughout the country who perceived the danger to the future quality of medical care has brought about this transformation. This activity stemmed largely from the National Education Campaign so ably directed by Clem Whitaker and Leone Baxter. They deserve great credit for their splendid performance in the face of many difficulties. I wish to express the gratitude of American medicine and my own personal thanks to them for an important job well done.

When one thinks back over the period of three and one half years and observes the change, he cannot help but be impressed. In that short time medicine has changed from an ideal whipping boy for any demagogue who wished to make a rabble rousing speech into a strong body able to respond with sufficient vigor and effectiveness to make the profession an unwise object to attack.

In the long view an even greater contribution, perhaps, has been the insistence that we meet the problems confronting medicine on a positive, constructive basis and that the Association develop a strong public relations department of its own to deal with matters of fundamental importance now and in the years to come. I have described the department and its operations in a President's Page and believe it to be growing in effectiveness.

As a result of our efforts and the increasing strength of medicine, those who would destroy our capacity to render the best care to the American people have altered their strategy. As far back as the 81st Congress it was apparent that no all-inclusive bill for socialized medicine could be passed.

Our opponents realized this earlier than did we and altered their course correspondingly. They ceased the effort to overwhelm us by frontal attack and resorted to more subtle flanking maneuvers by concentrating upon the so-called fringe bills, the most important of which was federal aid to medical education. To date we have been successful in preventing legislation which would have placed the medical schools of this country in imminent danger of bureaucratic control.

We recognize that our medical schools are in fiancial distress and we are making an effort to alleviate this situation through the American Medical

Education Foundation and the National Fund for Medical Education. The results to date, this year, are more encouraging than in the first year. Every one of us owes a great debt to medical education and it must have our fullest support. Medical education is every doctor's business.

Another manifestation of the recognition of changed conditions has been the politically inspired appointment of the President's Commission on the Health Needs of the Nation. There is adequate evidence to establish that it was created for the purpose of removing a very troublesome issue from public consideration during an election year. This course of action was predicted by a competent observer months in advance and we now have sufficient information of the immediately preceding events to know this to be the case.

Doubt remaining in the mind of anyone concerning the political motives behind the creation of the Commission should have been dispelled by the President's recent unwarranted, undignified and intemperate attack upon the American Medical Association. It is apparent that the Administration's intention to socialize medicine has undergone no change. It is obvious that it will resort to parliamentary legerdemain to accomplish what cannot be achieved by more direct and honest methods. The angry petulance of the outburst provoked by the Association's exposure of the political trickery reveals the true colors of the Administration.

The Commission was assigned an impossible task to perform within the period of time allotted and has been described as an organization whose principal accomplishment would be to survey all pre-existing surveys to decide if additional surveys were needed. I have discussed the appointment of this body at length elsewhere.

The Board of Trustees was unanimous in denouncing its creation and the political purposes behind it. Primarily out of deference to the chairman of the Commission, the American Medical Association has made the information in its possession available to the Commission and authorized officers and employees to testify before it while completely and thoroughly disapproving of its appointment.

After such testimony has been given, by participation in panel discussions, agents of the Commission have made purported digests of the testimony. In certain instances these have ignored completely most of the statements made to the Commission. Participants have then been requested to approve or amend the distorted digests. To amend the statements adequately would require days of effort in addition to the time occupied by travelling to and from Washington and testifying. The digests have the appearance of preconceived editorialized opinions of the person or persons preparing the abstracts and do not report fairly the points of view presented to the Commission. It is obvious that this procedure is not compatible with fair presentation of the facts. I bring this situation to the attention of the House to the end that it may be able better to evaluate the ultimate report.

In view of the magnitude of the task, the limited facilities and the short period of operation—characterized by the Commission Chairman as "too big a job for one year" any report emanating from it must be carefully examined. It will not only be based upon inadequate time and opportunity for study but may have all the misleading and dangerous attributes of a snap diagnosis. The report may be voluminous and impressive in appearance but probably will reflect the preconceived ideas of a majority of the Commission. It must be scrutinized with great care.

Let us not be misled by the apparent quiet of the moment. Our battle is not yet won. Complacency could well be a fatal error. I recall clearly the false security of 1946 at which time it was said that socialized medicine was "as dead as a dodo." Two years later American medicine confronted the gravest crisis in its history. There also are important external threats as will be detailed to you by Dr. Bauer.

Few persons realize the distance we have travelled, as a nation, down the road to socialism. As physicians we know that in the course of many diseases a point is reached where the changes of structure in the tissues become irreversible and restitution of normal function bcomes impossible. The disease of socialism which affects our body politic is at the present time not far from that point.

This may well be the year of decision. Unless the trend toward an all powerful government progressively extending its influence into our daily lives, limiting our horizons and sapping our initiative is halted, the changes in our political, economic and social structure will soon have reached the state of irreversibility. If this occurs we will have sacrificed the most precious heritage any nation ever had, and for a mess of socialistic pottage.

Medicine's firm stand has encouraged others to resist this process. At the present time we have more and stronger allies than ever before.

I urge every citizen who values the American tradition of freedom, opportunity and dignity of the individual to utmost effort this year. This may be our last chance to preserve those essential ingredients of American life.

Our leadership has inspired others. We have a great responsibility and a great opportunity. Let us not be in default.

DEATHS

WILLIAM ADAMS CARRIGAN

Dr. W. A. Carrigan, 76, of Society Hill, died on June 5th, after an illness of several months.

A native of Society Hill, Dr. Carrigan received his medical education at the University of Maryland (Class of 1902). Following his graduation he returned to his home community where he engaged in general practice for twenty-eight years. In 1930 he became Darlington County Health Officer and held this position in 1950.

Dr. Carrigan was a faithful attendant upon medical meetings and served as secretary of the Darlington County Medical Society for a period of years.

He is survived by his widow, the former Miss Beulah Womack and two daughters, Mrs. W. B. Hodges of Asheville, and Mrs. Lawson Nolan of Society Hill.

FREDERICK CANNON BRINKLEY

Dr. F. C. Brinkley, 62, died on June 11th of cardiac disease.

A native of Aiken County, Dr. Brinkley received his education at the University of Georgia School of Medicine (Class of 1910). Following graduation he began the practice of medicine in Ellenton which continued until his retirement several months ago.

In addition to an extensive medical practice Dr. Brinkley was active in civic and political circles. He was mayor of Ellenton for several years and received national publicity as such when the South Carolina H Plant forced evacuation of the town. Dr. Brinkley also served eight years as Senator from Aiken County, was a member of the South Carolina Highway Commission for two years, served as a member of the Savannah River Navigation Commission, and was a delegate to the National Democratic Convention in 1936 and 1940.

Dr. Brinkley is survived by his widow, the former Miss Lilly Owens of Dunbarton, and three daughters.

EDMOND J. BRYSON

Dr. E. J. Bryson, 66, died in Liberty, May 29.

A native of North Carolina, Dr. Bryson received his medical degree from Lovola University Medical School and followed this with post-graduate study at Charleston, New York, and Chicago.

Following graduation, he entered military service during World War I and spent most of his time at Camp Jackson. In 1915, he entered practice in North Carolina.

In 1925 Dr. Bryson opened an office for practice in Liberty where he worked for about twenty years. During this time he not only carried on an extensive practice, but was also active in civic affairs, serving as Mayor of the town for 11 years. Subsequently, he moved to Greenville and then to Asheville where he devoted most of his activities to work with alcoholics.

Dr. Bryson is survived by his wife, the former Miss Mabel Klepper, and two daughters.

NEWS ITEMS

Dr. Walter R. Mead, Florence physician and civic leader, was the recipient recently of the "Man of the Year" civic service award, sponsored annually by the Rotary, Kiwanis, Optimist, Lions and Exchange Clubs of Florence.

Dr. Orin R. Yost, Medical Director of the Edgewood Sanitarium at Orangeburg, attended a meeting of the American Psychiatric Association, held recently in Atlantic City.

Dr. William P. Turner of Greenwood has been appointed to the State Board of Medical Examiners to replace Dr. C. H. Blake of Greenwood. Dr. Wyman King of Batesburg will replace Dr. J. D. Parker of Greenville on the State Board of Examination and Registration of Nurses.

Dr. O. A. Alexander of Darlington has returned to private practice and is associated with Dr. A. P. Rosenfeld. Dr. Alexander became County Health Officer of Darlington County in 1950.

Dr. E. B. Michaux, Dr. S. C. Black and Dr. Tom Hankins, all of Dillon, were guests of the Eli Lilly Company May 21 to May 24 in Indianapolis, Ind.

Dr. B. J. Workman of Woodruff has been appointed to the State Advisory Hospital Council for a four year term. He replaces Dr. M. R. Mobley of Florence.

Dr. W. McNeill Carpenter is re-opening his office in Greenville, his practice being limited to eye, ear, nose and throat work.

Attending the American Academy of Pediatrics in Washington recently were Drs. J. I. Waring, B. O. Ravenel, and Bachman S. Smith of Charleston, Dr. Walter Moore Hart of Florence.

Dr. D. J. Greiner, a graduate of the University of Pittsburgh, has been appointed Director of the Department of Pathology at the McLeod Infirmary in Florence.

CORRESPONDENCE

Dr. Julian P. Price, Editor
The Journal of the
South Carolina Medical Association
Florence, South Carolina

Dear Julian:

Dr. John Douglass, immediate past-president of the South Carolina Dental Association, asked me to ask you to publish the following:

Senator Burnet R. Maybank has been working actively to bring about an extension of the law which allows payment of $100 over and above the ordinary rank pay to all dental and medical officers in the United States Armed Forces. The following telegram was received from Senator Maybank early in June:

"We passed the continuing bill to pay the dentists and physicians. Please advise our friends." /s/ Burnet R. Maybank.

It gives me pleasure to pass this on to you for John Douglass, who worked with us actively in our efforts to bring about a reorganization of the State Board of Health.

With kind regards and best wishes, I am

Sincerely yours,

J. Decherd Guess, M. D.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

GRIEVANCE COMMITTEE ORGANIZED

The newly created Grievance Committee of the South Carolina Medical Association held its first meeting on June 9, 1952 and organized with election of the following officers: Dr. Roderick Macdonald, Chairman; Dr. Weston Cook, Vice-Chairman; Dr. J. A. Siegling, Secretary.

The Committee adopted for its guidance in discharging the duties delegated to it by the House of Delegates, the Rules which had been previously endorsed by Council, and which were published in the Journal of the South Carolina Medical Association in August, 1951. It directed that the creation, organization and general purposes of the Committee be fully publicized.

Dr. Cook, Vice-Chairman, reported to Council at its meeting on June 10, the progress of the Grievance Committee thus far, and its plans were approved.

BLUE CROSS AND BLUE SHIELD OFFER NON-GROUP ENROLLMENT

Blue Cross and Blue Shield will offer non-group membership during the month of August. The non-group enrollment will be state-wide, and will be offered to anyone under the age of 65, regardless of place of employment and without the usual group requirements. Applicants may enroll on an individual or family contract, but married women must enroll on a family contract and both husband and wife must be under the age of 65.

This type of Blue Cross-Blue Shield enrollment comes but once a year. It offers an opportunity to thousands of people who have shown interest in Blue Cross and Blue Shield, but who have not been eligible for membership because of the usual group quota requirements. The enrollment will close on the last day of August, and protection will begin on September 15.

Informational literature and applications are being sent to all member hospitals and all doctors in the State. Completed applications should be returned to any area office of Blue Cross and Blue Shield with the required quarterly payment in advance.

This year, Blue Shield will have additional coverage to offer in the medical benefits that will be effective August 1. A subscriber may apply for either the Blue Shield Surgical Plan, or the Surgical-Medical Plan at the slightly higher rates. Benefits and rates are fully explained in the informational literature. .

The August non-group enrollment affords the doctor an opportunity to acquaint his patients with the excellent coverage and protection offered by Blue Cross and Blue Shield. These two Plans are promoting a program of better health protection for everyone, and financial security in the event of illness or emergency. As the cost of hospital and medical care has spiralled, the Plans have made every effort to keep step with the trend, and to provide the best of care for their members at the lowest possible cost.

BLUE SHIELD CONTINUES TO GROW

The South Carolina Blue Shield Plan continues a steady, substantial growth. The following Enrollment Report for the month of May shows by comparison the extent of its growth during an average thirty days period.

We understand that these figures do not include a substantial number of the employees at the DuPont plants, whose contracts have become effective since the report was made up.

The last meeting of the Board of Directors was the occasion for election of officers for the year (the first meeting following the Annual Meeting of the South Carolina Medical Association). All of the officers were reelected, as follows: President—J. D. Guess, M. D., Vice-President—M. L. Meadors, Secretary—George D. Johnson, M. D., Treasurer—J. D. Ashmore.

The current healthy financial situation of the Plan is reflected in its balance sheet, as of May 31st, 1952, which follows the Enrollment Report below.

SOUTH CAROLINA MEDICAL CARE PLAN ENROLLMENT REPORT

Month of May, 1952

	Employed Subscribers	Dependents	Total
Membership at end of preceding month	16508	27173	43681
New Enrollment—Current Month	1035	1800	2835
Cancellations—Current Month	241	363	604
Net Enrollment—End of Current Month	17302	28610	45912

Balance Sheet as of May 31, 1952

ASSETS

CASH IN BANKS		
General Fund Account	$68,570.98	
Physicians Claims Account	17,113.25	$85,684.23

ACCOUNTS RECEIVABLE			
Due From Blue Cross Plan	$31,986.50		
Subscriber Payments	3,641.06	35,627.56	
FURNITURE AND EQUIPMENT			
Purchase Price	$ 78.40		
Less: Res. For Depreciation	16.28		
Net Book Value		62.12	
TOTAL ASSETS			$121,373.91

LIABILITIES, RESERVES AND CAPITAL

ACCOUNTS PAYABLE			
Due To Blue Cross Plan	$ 7,306.21	$ 7,306.21	
DEFERRED INCOME			
Unearned Sub. Charges	$18,200.38		
Subs. Charges Paid in Advance	48.95	18,249.33	
RESERVES			
Reserve For Unpaid Claims	$20,568.37	20,568.37	
CAPITAL AND SURPLUS			
Donated Capital	$10,250.00		
Surplus	65,000.00	75,250.00	
TOTAL LIABILITIES, RESERVES AND CAPITAL			$121,373.91

FURTHER DEVELOPMENTS WITH HR 7800

In this column last month we discussed at some length the action of the National House of Representatives with respect to HR. 7800, the bill to provide certain amendments to the Social Security Law. It will be recalled that on May 19, a motion to suspend the rules and pass the bill was defeated through failure to attain the necessary two-thirds majority, although an actual majority of the votes were in favor of the motion.

The advocates of the measure, including Section 3, to which the medical profession objects, were not satisfied with the result of the vote on May 19, and continued their efforts. There were public statements by the President, Mr. Ewing, and certain officials of the American Medical Association. On June 12, in the final session of the House of Delegates in Chicago, the following resolution was adopted, after some discussion:

WHEREAS, Congressman Doughton (D., N. C.) on May 12 introduced in the Congress an Omnibus Measure, H. R. 7800, 82nd Congress, providing for various amendments to Title II of the Social Security Act, which bill was reported favorably by the Ways and Means Committee of the House of Representatives on May 16 and brought before the House of Representatives on May 19 under a suspension of the rules; and

WHEREAS, Section 3 of this measure provided for the introduction of a new theory in the Social Security Program which in its implementation could result in the socialization of the medical profession inasmuch as it would provide that the Federal Security Administrator should (a) determine what constitutes permanent and total disability; (b) establish the types of proof necessary to establish permanent and total disability; (c) provide by regulation when and where physical examinations should be taken; (d) be authorized to prescribe the examining physician or agency (including federal installations); (e) establish the fees; (f) be authorized to pay travel expenses and subsistence incident to the taking of such physical examinations, and (g) have power to curtail Old Age and Survivors' Insurance benefits because of non-compliance with regulations of this section; and

WHEREAS, The American Medical Association strongly protested against its adoption without full and complete hearings with respect to the controversial provisions of Section 3 of the Bill; and

WHEREAS, Following the rejection of the Bill on May 19 by the House of Representatives, certain amendments were made to the Bill by the House Ways and Means Committee which purport to eliminate the objectionable features of Section 3, and

WHEREAS, Notwithstanding certain deletions from Section 3 the fundamental purpose of this Bill to extend the power and authority of the Federal Security Administrator remains unchanged, and the deletions which have been made are only another attempt to hoodwink the public into believing the section is completely altruistic; and

WHEREAS, The attempt is again being made to present this Bill to the House of Representatives next Monday (June 16) under a suspension of the rules; and

WHEREAS, The defeat of H. R. 7800, depriving Social Security beneficiaries of numerous additional benefits, was a direct result of the Truman Administration's attempt to play politics by tying in a Socialized Medicine scheme with an otherwise popular measure; therefore be it

Resolved, That the American Medical Association

condemns the breach of faith by this Administration with those who would benefit from this Bill in a flagrant attempt to railroad through a provision to aid in the socialization of medicine, which could not possibly be adopted if considered openly and fairly; and be it further

Resolved, That the American Medical Association urges that Congress rerefer this Bill to the Committee where it should be subject to the ordinary Democratic processes of legislation.

Despite the foregoing and efforts on the part of others opposed to the passage of Section 3, the House on June 16, adopted the motion and passed the bill by the necessary majority of two thirds. This reversal of its previous action was not particularly surprising in view of the strenuous, and in some respects, bitter campaign waged by the proponents of the bill between the dates of the two votings. It is not surprising particularly, in view of the fact that the measure provides additional sums ($5.00 per month) for most of the beneficiaries of the old age and retirement provisions of the present Social Security Law. Nobody objects seriously to these provisions and certainly the medical profession has not directed its attack on the measure because of any opposition to this part of it. In an election year it is beyond reasonable expectation that such a measure would fail of passage. Section 3, providing extensive authority to the Federal Security Administrator in the determination of those entitled to total and permanent disability benefits, in the designation of the physicians who would conduct the necessary examinations, and in determining the extent and frequency of such examinations, was included in the measure for the very reason that it was a bill destined almost certainly for passage.

At the present writing, however, it still is not law. The Senate Committee on Finance, to which it was referred in that body, deleted the objectionable Section 3, and reported the bill favorably with that exception. At this writing, the measure is yet to come before the Senate for final action.

AIMS AND ACCOMPLISHMENTS OF THE WORLD MEDICAL ASSOCIATION*

Louis H. Bauer, M. D., F.A.C.P. Secretary-General

In the minds of many of my colleagues an understandable confusion exists between the World Medical Association (WMA) and the World Health Organization (WHO). To explain the difference very briefly, WHO is an official branch of the United Nations, representing the governments of the world in the field of medicine, whereas WMA represents the practicing physicians and national medical associations of the world. It is a non-governmental organization and its funds are received from membership dues and voluntary contributions.

*Reprinted from The Westchester Medical Bulletin, May 1952.

To clarify further just what the World Medical Association is and does, a little historical background is needed. During World War II, doctors from all over the world frequented the Headquarters of the British Medical Association in London. They formed friendships and discovered that they had common problems. Ways and means were discussed of perpetuating these relationships. Several conferences were held and representatives of national medical associations formed an Organizing Committee. This Committee drafted a Constitution and By-Laws which were submitted to the First General Assembly at Paris. Official organization was effected in that city on September 18, 1947.

OBJECTIVES

The objectives of the Association as outlined in the Constitution are:

(1) To promote closer ties among the national medical organizations and among the doctors of the world by personal contact and all other means available.

(2) To maintain the honor and protect the interests of the medical profession.

(3) To study and report on the professional problems which confront the medical profession in the different countries.

(4) To organize an exchange of information on matters of interest to the Medical profession.

(5) To establish relations with, and to present the views of the medical profession to The World Health Organization, UNESCO and other appropriate bodies.

(6) To assist all peoples of the world to attain the highest possible level of health.

(7) To promote world peace.

The first meeting was devoted to matters of organization; election of officers; and outlining a specific program for the ensuing year.

The Association's unit of membership is the national medical association, which is most representative of the medical profession in the country. Each association is entitled to two delegates, two alternate delegates and as many observers as it desires. These delegates form a General Assembly which meets once a year. So far as possible, the General Assembly meets in a different country each year. The General Assembly determines all policies.

The affairs of the Association are carried on by a Council which is elected by the General Assembly. The Council consists of the President, President-Elect and Treasurer of the Association and ten members each elected for a term of three years. The Council meets twice a year.

Five General Assemblies have been held, in Paris, Geneva, London, New York and Stockholm. The mid-year meetings of the Council have been held in New York, Madrid and Copenhagen and Geneva. Its next meeting will be in Brussels. The next General Assembly will be in Athens, October 12-16, 1952.

There are now forty-three nations represented in The World Medical Association.

ACTIVITIES

The activities of the Association to date have in-

cluded the following:

1. A study of medical man power. This study shows the number of doctors in the various countries in relation to the population, and the number of general practitioners and specialists. There is a summary of the organization and functions of the national medical associations, and a discussion of the status of the medical profession. This study is constantly being revised and brought up to date.
2. A survey of medical education in some 26 countries. This compares the standards in effect in these countries. A study of this sort has never been made before. A second survey is now under way and will give the facts about individual medical schools, much along the lines of the report of the Council on Medical Education and Hospitals of the American Medical Association for schools in the United States and Canada.
3. A survey has been made of Postgraduate Medical Education in 28 countries. This includes not only specialist training but graduate training of the general practitioner.
4. There has also been a study of Cult Practice in the various countries which covers the rules and regulations governing unauthorized medical practice, the number of cultists and cultist schools.
5. A preliminary study has been made of medical advertising. This and the preceding study are being followed up to make them more complete.
6. A very full survey has been completed in Social Security as it affects Medical Practice. This study will have annual supplements, as it is a rapidly changing field.
7. There are now under way studies on the number and distribution of hospitals and the availability of certain pharmaceuticals and biologicals. These will shortly be ready for publication.
8. A quarterly Bulletin is published in three languages. This Bulletin gives the proceedings of the Association, summaries of its studies and news from all parts of the world.

We have called on all countries to protect freedom in medical research. We have condemned euthanasia.

In 1948 the Association adopted a modification of the Hippocratic Oath, known as the Declaration of Geneva. This was the result of a study of German War Crimes. As will be seen the Declaration, while simpler than the Hippocratic Oath, covers points not mentioned in the latter. The Declaration follows:

DECLARATION OF GENEVA

Adopted by the General Assembly of the World Medical Association in Geneva, September 1948

AT THE TIME of being admitted a Member of the Medical Profession

I solemnly pledge myself to consecrate my life to the service of humanity.

I will give to my teachers the respect and gratitude which is their due;

I will practice my profession with conscience and dignity;

THE health of my patient will be my first consideration;

I will respect the secrets which are confided in me;

I will maintain by all means in my power, the honor and the noble traditions of the medical profession;

MY colleagues will be my brothers;

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient;

I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity.

I make these promises solemnly, freely and upon my honor.

It is hoped that this will be required by medical schools and licensing bodies as a prerequisite to graduation or license.

A natural sequence to the Declaration was the adoption of an International Code of Medical Ethics, something which heretofore never existed. The Code is brief and is as follows:

INTERNATIONAL CODE OF MEDICAL ETHICS

Adopted by the Third General Assembly of The World Medical Association at London, England, October 1949

Duties of Doctors in General

A doctor must always maintain the highest standards of professional conduct.

A doctor must not allow himself to be influenced merely by motives of profit.

The following practices are deemed unethical:

a) Any self advertisement except such as is expressly authorized by the national code of medical ethics.

b) Taking part in any plan of medical care in which the doctor does not have professional independence.

c) To receive any money in connection with services rendered to a patient other than the acceptance of a proper professional fee, or to pay any money in the same circumstances without the knowledge of the patient.

Under no circumstances is a doctor permitted to do anything that would weaken the physical or mental resistance of a human being, except from strictly therapeutic or prophylactic indications imposed in the interest of the patient.

A doctor is advised to use great caution in publishing discoveries. The same applies to methods of treatment whose value is not recognized by the profession.

When a doctor is called upon to give evidence or a certificate he should only state that which he can verify.

Duties of Doctors to the Sick

A doctor must always bear in mind the importance of preserving human life from the time of conception until death.

A doctor owes to his patient complete loyalty and all the resources of his science. Whenever an examination or treatment is beyond his capacity he should summon another doctor who has the necessary ability.

A doctor owes to his patient absolute secrecy on all which has been confided to him or which he knows because of the confidence entrusted to him.

A doctor must give the necessary treatment in emergency, unless he is assured that it can and will be given by others.

Duties of Doctors to Each Other

A doctor ought to behave to his colleagues as he would have them behave to him.

A doctor must not entice patients from his colleagues.

A doctor must observe the principles of "The Declaration of Geneva" approved by The World Medical Association.

The Declaration is appended at the end of the Code.

UNITED STATES COMMITTEE

When The World Medical Association was first organized it was apparent that it could never be a real functioning organization without sufficient funds. Consequently, we organized a United States Committee which has been incorporated in New York as a non-profit organization. This Committee is underwriting the expenses of maintaining the Secretariat, certain expenses of the Council and the publication of the Bulletin. Membership in this Committee entitles the member to receive all the publications of the Association, including the Bulletin. Arrangements are made for members traveling in foreign countries to facilitate their visiting medical schools and hospitals. Memberships are also available for organizations as well as for individuals, and many medical organizations and organizations allied to medicine are members of the United States Committee.

WMA AND WHO

The World Medical Association has liaison with many international organizations. It has close liaison with the World Health Organization (WHO). The latter is a branch of the United Nations and it represents the governments of the world in the field of medicine. It is supported by government funds. The World Medical Association represents the doctors of the world and the medical associations. It is a non-governmental organization and its funds are received from dues and voluntary contributions.

There are many matters in which both organizations are jointly interested, such as training of medical and auxiliary personnel, an international pharmacopoeia, international quarantine regulations, etc. In order that the viewpoint of the medical profession may be presented and upheld, the Association needs funds to do its share of the work, so that these matters will not be decided from a purely governmental standpoint.

Modern communication and transportation have made the world smaller. What happens in one area of the world may well affect another area, even though they may be separated by thousands of miles. The practicing physician, wherever he may be located, is concerned with the health of the people and the nature of the practice of medicine in other areas.

The standards of medical education and medical care in the United States are high. We can help underprivileged areas to raise their standards. These areas are calling upon us for aid, and that aid can be extended through The World Medical Association.

MEDICAL TEAMS

The Association plans, if funds become available, to send medical teams to areas lacking properly trained medical personnel, so that they may receive the benefits of modern research and practice. It also hopes to bring men from these areas to countries where they may be properly trained and then return them to their own countries where they may put to good effect the training they will have acquired. This will not only relieve local suffering, but will raise the standards of health and medical care of the world as a whole.

One of the great accomplishments of The World Medical Association has been the bringing of doctors together from all parts of the world. They have found that the language of medicine is universal. The doctors of the world think pretty much alike. Through their common bond of medical science exercised in the interest of all humanity, suspicion and distrust disappear.

It is clearly apparent that the doctors of the world must accept an international role just as they have accepted their roles as public servants to their nations and local communities. They can do this by uniting in an organization which has the strength and prestige to command respect for its opinions and recommendations.

FIRST WORLD CONFERENCE ON MEDICAL EDUCATION

Plans have been made for convoking the First World Conference on Medical Education in London, August 24-29, 1953. All concerned with medical education will be invited. The aim of the Conference will be to effect an exchange of ideas, develope possible unification of thought and to aid the underdeveloped areas of the world. The main themes to be discussed in the Conference will be:

1. Requirements for entrance to medical school, including the selection of students.
2. Social Medicine—its concepts and place in the medical curriculum.

3. The aims and content of the medical curriculum.

It is felt that the First World Conference on Medical Education will be one of the most important events in medical history. WHO is cooperating with the World Medical Association in this undertaking.

MEMBERS INVITED

All members of the Medical Society of the County of Westchester are invited to identify themselves with world health through the World Medical Association by joining its United States Committee, Inc. Membership brings with it the following:

1. *Certificate of Membership,* an introduction card to 500,000 doctors of 43 nations joined in a world-wide movement of the highest possible level of health.
2. *The World Medical Association Bulletin,* issued quarterly, and all published studies, with data nowhere else available on scientific, economic, educational, and social world trends.
3. *Letters of Introduction* to foreign medical associations and their members, facilitating professional contacts when doctors travel abroad.
4. *A share* in defending the interests of the medical profession in collaboration with other international groups, such as UNESCO and WHO.
5. *The satisfaction* of sharing the advantages of our medical progress with other lands, thus repaying a debt for the inspiration we have drawn from many countries through the generations.

Any doctor in the Medical Society of the County of Westchester may join the World Medical Association's United States Committee for $10.00, the annual dues. The Secretariat of the Association is located in the Academy of Medicine Building, 2 East 103rd Street, New York 29, N. Y.

Help bring new hope for the health of humanity!

(Ed. Note: The invitation to join WMA extends to all members of the South Carolina Medical Association, and other recognized medical societies.)

REPORT ON BRITAIN'S EXPERIMENT

Britain's four year experiment in socialized medicine has been described in a recent issue of The Freeman (June 16) as a "Utopia in a Straitjacket" which has stifled medical research, degraded the doctor and virtually bankrupted the nation.

Melchior Palyi, who conducted a survey of Britain's national health program for the publication, says:

"This something-for-nothing Utopia, advertised world-wide, is now in slow retreat; the Labor government itself set a ceiling of $1,100,000,000 on direct medical expenditures; and the conservative government is attempting to enforce it by making the patient pay roughly one-half the cost of dentures and eyeglasses, and a small fee for each prescription."

Palyi, author of "Medical Care and the Welfare State," says that in less than three years doctors wrote 609 million prescriptions, fitted 19,500,000 pairs of glasses and 130,000 hearing aids and dentists worked on seven million dentures. He added:

"The overall state of general practice is bad and still deteriorating and has reached the point where, despite the efforts of the most conscientious individual doctors, it is at best a very unsatisfactory medical service and at the worst a positive source of public danger.

"The nation's health is actually jeopardized because the exorbitant cost of over-extended curative medicine forces the shelving of urgently needed outlays to prevent the occurrence and spread of disease."

The author also asserted that under the National Health Program his on-the-spot survey showed that families are abandoning the old and the defective, who, he added, are filling the hospitals. Palyi continued:

"The public is adopting the attitude that because of the Welfare State they have no responsibilities for their aged parents."

The Freeman quoted Palyi as saying that the costs of governmentalized medicine have trebled in four years to more than 19 per cent of the national budget and added:

"Yet new hospitals are conspicuously non-existent, and the enlargement of old ones is negligible, though the lack of adequate facilities was one of the major arguments for the new scheme."

The Freeman article pointed out that under the national health plan, doctors in industrial centers are each burdened with 3,000 to 4,000 and even more registered patients.

It said that this means that a doctor has three minutes or less for a consultation with his patient during which time he should diagnose and advise, make out an ever-increasing number of prescriptions, write letters to specialists and hospitals and fill out many forms of official documents.

Palyi said that within the first three years of operation more than every second Britisher has received free dental treatment. And he warned:

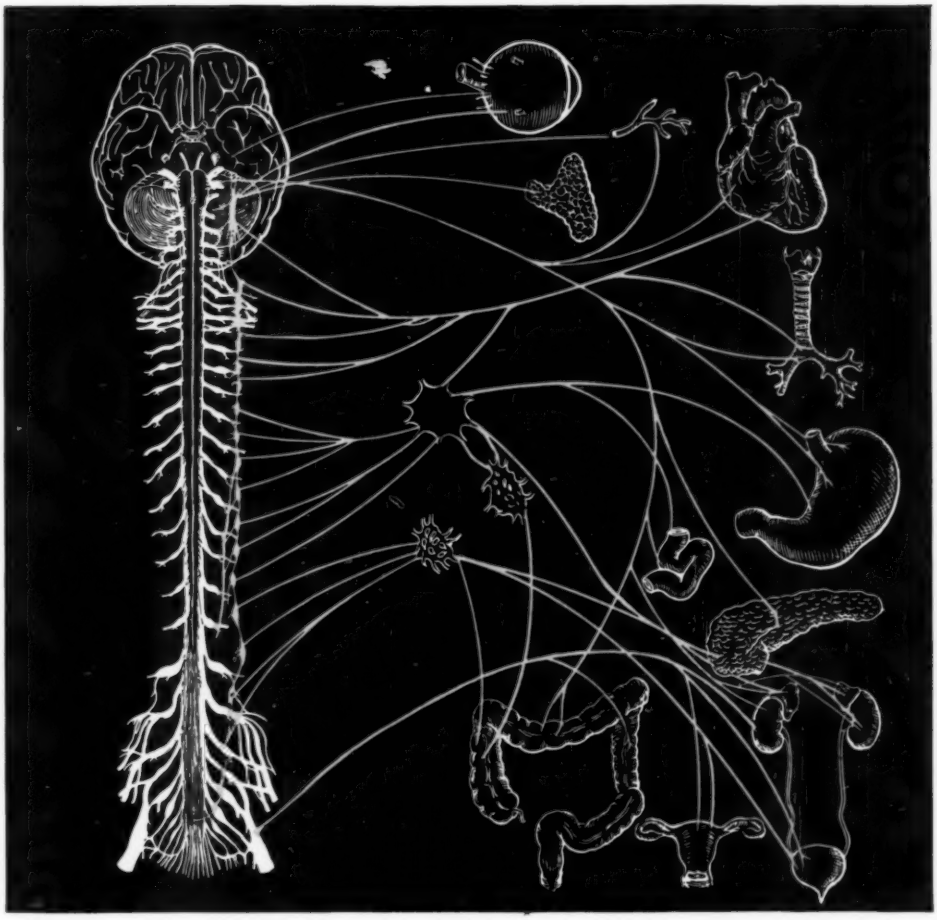
"But the dentists, rushed madly from one chair to another, are forced to sacrifice the dental care of school children whose teeth are decaying."

The Freeman stressed that under the national health program many deserving cases are obliged to wait as much as 12 months for a hospital bed because of crowded conditions and added:

"The core of the problem is the perversion of the doctor-patient relationship into a silent conspiracy to provide both partners with mutual advantages at the expense of the scheme.

"It is generally understood that deals between drug producers and panel doctors are a widespread practice."

(Reprints of the survey in booklet form are available from The Freeman, 240 Madison Avenue, New York 16, N. Y. at ten cents a copy).



Excess neural stimulation over the parasympathetic subdivision plays an important role in such clinical conditions as peptic ulcer, certain forms of gastritis, pylorospasm, pancreatitis, spastic colon, bladder spasm and hyperhidrosis.

Banthine® Bromide (brand of methantheline bromide) is a true anticholinergic which inhibits parasympathetic stimuli, acting selectively on the gastrointestinal and genitourinary systems. It exerts little or no influence on the normal cardiovascular system. Banthine is supplied in oral and parenteral dosage forms.

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.